

THE INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE
**«MODERN ASPECTS OF MICROBIOLOGY, VIROLOGY AND BIOTECHNOLOGY
 IN WAR AND POST-WAR PERIOD»**

Organizing Committee:

Mykola Spivak – Prof., Doctor of Biological Sciences, Academic of the NAS of Ukraine, Director of the Institute of Microbiology and Virology of the NAS of Ukraine (IMV NAS of Ukraine)

Larysa Safronova – Doctor of Biological Sciences, Senior Researcher, Deputy Director of IMV NAS of Ukraine

Liudmyla Lazarenko – Doctor of Biological Sciences, Senior Researcher, Deputy Director of IMV NAS of Ukraine

Olena Andrienko – Candidate of Biological Sciences, Scientific Secretary of IMV NAS of Ukraine

Olga Vasyliuk – Candidate of Biological Sciences, Senior Researcher, Laboratory of Microbial Synthesis Biotechnology, IMV NAS of Ukraine

Tetiana Hnatiuk – Candidate of Biological Sciences, Senior Researcher, the Department of Phytopathogenic Bacteria, IMV NAS of Ukraine

Marichka Zlatohurska – Candidate of Biological Sciences, Research Fellow, the Department of Bacteriophage Molecular Genetics, IMV NAS of Ukraine, Secretary of the Young Scientists Council (YSC)

Mariia Loboda – PhD, Research Fellow, the Department of General and Soil Microbiology, IMV NAS of Ukraine, the Deputy Head of the YSC

Andrii Zarembo – PhD student, leading engineer, the Department of Virus Reproduction, IMV NAS of Ukraine, Deputy Head of the YSC

**Day 1
November 15, 2023**

9.00 – 10.00
(UTC +2)

Registration

9:30 – 9:35

Welcome word

Mykola Spivak – Prof., Doctor of Biological Sciences, Academic of the NAS of Ukraine, Director of the IMV NAS of Ukraine

9:35 – 13:00

Plenary session

Moderators: Larysa Safronova – Doctor of Biological Sciences, Senior Researcher

Marina Fomina – Doctor of Biological Sciences, Senior Researcher

Volodymyr Patyka – Prof., Doctor of Biological Sciences, Academic of the NAAS of Ukraine, IMV NAS of Ukraine – "COMPLEX MICROBIAL INFECTION IN MODERN AGRICULTURE"

Ivan Šalamon – Prof., RNDr., CSc., MBA, University of Presov (Slovakia) – "CHEMOTYPES OF CHAMOMILE (*MATRICARIA RECTITA* L.) IN UKRAINE AND THEIR IMPORTANCE"

Rahela Carpa – PhD, Babeş-Bolyai University (Romania) – "ENZYMATIC ACTIVITY IN SOILS FROM RÂPA ROŞIE (RED RAVINE)"

Iryna Budzanivska – Prof., Doctor of Biological Sciences, ESC "Institute of Biology and Medicine", Taras Shevchenko National University of Kyiv – "VIROLOGY: RECENT ADVANCES AND ONGOING CHALLENGES IN THE MODERN WORLD"

Nazim ŞEKEROĞLU – Prof., Dr., Gaziantep University (Turkey) – "ANTIMICROBIAL CAPACITY OF TURKISH MEDICINAL PLANTS FOR PROBABLE PANDEMICS IN THE FUTURE"

11:20 – 11:35 **Coffee break**

Inna Harmasheva – Candidate of Biological Sciences, Senior Researcher, IMV NAS of Ukraine – "THE ROLE OF LACTIC ACID BACTERIA IN FOOD PRODUCT SAFETY"

Judit Csabai – Dr., University of Nyíregyháza (Hungary) – "EFFECT OF VARIOUS STERILIZATION PROCEDURES ON THE *IN VITRO* GERMINATION OF CARNATION SPECIES PROTECTED IN HUNGARY"

Grzegorz Pilecki – MD, PhD, Silesian Academy in Chorzów (Poland), Children's Orthopedics' Clinic – "QOL AFTER SEPSIS. CASE REPORT"

Maryna Kryvtsova – Prof., Doctor of Biological Sciences, Uzhhorod National University – "ANTIMICROBIAL AND ANTIBIOFILM-FORMING PROPERTIES OF THE PLANT ORIGIN SUBSTANCES: FROM SCREENING TO PHYTOCOMPOSITIONS"

13:00 – 13:40 **Lunch break**

13:40 – 16:40 **Session I. Physiology, Biochemistry, and Genetics of Microorganisms**

Moderator: Volodymyr Patyka – Prof., Doctor of Biological Sciences, Academic of the NAAS of Ukraine

Vitaliy Volkogon – Prof., Doctor of Agricultural Sciences, Corresponding Members of the NAAS of Ukraine, Institute of Agricultural Microbiology and Agro-Industrial Production of the NAAS of Ukraine – "THE SIGNIFICANCE OF MICROORGANISMS FOR SOIL HEALTH AND THE FORMATION OF SUSTAINABLE AGROCOENOSES"

Ivan Kurdish – Prof., Doctor of Biological Sciences, IMV NAS of Ukraine – "PROSPECTS FOR THE USE OF THE COMPLEX BACTERIAL PREPARATION AZOGRAN IN ORGANIC FARMING"

Ihor Dragovoz – Doctor of Biological Sciences, Senior Researcher, IMV NAS of Ukraine – "COMPARATIVE PHOSPHATE-MOBILIZING AND ANTAGONISTIC PROPERTIES OF SOIL STRAIN *BACILLUS VELEZENSIS* 20F AND MOLECULAR GENETIC ANALYSIS OF THEIR DEMONSTRATION"

Olha Kravchenko – Candidate of Biological Sciences, Docent, National University of life and Environmental Science of Ukraine – "SELECTION OF EFFECTIVE CONCENTRATIONS OF DRUGS OBTAINED BY ELECTRO-PULSE ABLATION METHOD FOR BACTERIAL PATHOGENS OF SOY AND WHEAT"

Yaroslav Savchuk – Candidate of Biological Sciences, Deputy Head of the Department, IMV NAS of Ukraine – "SPECTRUM OF BIOLOGICAL PROPERTIES OF *TRICHODERMA* STRAINS – ANTAGONISTS OF PLANT PATHOGENIC FUNGI AND BACTERIA"

14:55 – 15:10 **Coffee break**

Nury Infante – PhD, Universitat Politècnica de Catalunya (Spain) – "TESTING THE EFFECT OF HYDROLOGICAL EVENTS ON THE SPREAD OF ANTIMICROBIAL RESISTANT BACTERIA IN FRESHWATER AND THE USE OF CRISPR-CAS TECHNOLOGY TO ADDRESS ANTIBIOTIC TOLERANCE"

Svitlana Serga – Candidate of Biological Sciences, MSCA Fellow, Senior Researcher, Center for Biology and Management of Populations, National Research

Institute for Agriculture, Food and the Environment (France), National Antarctic Scientific Center of Ukraine – "INCOMPATIBLE INSECT TECHNIQUE PERSPECTIVE TO CONTROL *DROSOPHILA SUZUKII* SPREAD"

Nadiya Yamborko – Candidate of Biological Sciences, Senior Researcher, IMV³ NAS of Ukraine – "COMPLETE METABOLIZATION OF GAMMA-HEXACHLOROCYCLOHEXANE BY SOIL BACTERIUM *BACILLUS MEGATERIUM* IMV B-7287"

Hanna Huliaieva – Candidate of Biological Sciences, Senior Researcher, IMV NAS of Ukraine – "FATTY ACIDS COMPOSITION OF WHEAT SEEDS AFTER INFECTION WITH PHYTOPATHOGENIC MICROORGANISMS AND PRE-SOWING TREATMENT WITH GERMANIUM NANO CITRATES"

Nataliia Tkachuk – Candidate of Biological Sciences, Docent, T.H. Shevchenko National University "Chernihiv Colehium" – "BIODAMAGE OF STEEL BY *DESULFOVIBRIO ORYZAE* UNDER THE INFLUENCE OF SUPERNATANT FROM CULTURES OF *STREPTOMYCES GARDNERI* AND *BACILLUS VELEZENSIS*"

Sergii Syrchin – Candidate of Biological Sciences, Senior Researcher, IMV NAS of Ukraine – "A CONSOLIDATED APPROACH FOR THE IDENTIFICATION OF *ALBIFIMBRIA VERRUCARIA* (*MYROTHECIUM VERRUCARIA*)"

Day 2

November 16, 2023

9:30 – 12:10
(UTC +2)

Session II. Physiology, Biochemistry, and Genetics of Microorganisms

Moderator: Liudmyla Lazarenko – Doctor of Biological Sciences, Senior Researcher

Lidiya Pasichnyk – Doctor of Biological Sciences, IMV NAS of Ukraine – "BACTERIA OF THE GENUS *BURKHOLDERIA* IS A THREAT TO THE ECOLOGICAL HOMEOSTASIS OF AGROCENOSSES"

Bohdan Matselyukh – Prof., Doctor of Biological Sciences, Corresponding Members of the NAS of Ukraine, IMV NAS of Ukraine – "PHYSICOCHEMICAL PROPERTIES AND ANTIMICROBIAL ACTIVITY OF THE ANTIBIOTIC STRAIN *STREPTOMYCES* SP. B19"

Oleksandr Balko – Candidate of Biological Sciences, Senior Researcher, IMV NAS of Ukraine – "APPLICATION OF BACTERIOCINS TO PREVENT BIOFILM FORMATION OF *PSEUDOMONAS AERUGINOSA*"

Tetyana Tugay – Prof., Doctor of Biological Sciences, The Open International University of Human Development "Ukraine" – "STUDY OF THE LEVEL OF CHANGES IN PROOXIDANT-ANTIOXIDANT PROTECTION IN POST-RADIATION GENERATIONS OF *ASPERGILLUS VERSICOLOR* WITH A SIGN OF POSITIVE RADIOTROPISM AND WITHOUT IT"

Natalia Shenderovska – Candidate of Biological Sciences, Senior biotechnologist, Scientific Center, LLC Yuria Pharm – "ErCAS12a GENE EDITING SYSTEM PROFILING FOR EFFICIENT GENE KNOCKOUT IN CHINESE HAMSTER OVARY CELLS"

10:55 – 11:10

Coffee break

Liudmyla Dankevych – Candidate of Biological Sciences, Senior Researcher, IMV NAS of Ukraine – "EFFECTIVENESS OF THE 16S-ITS-23 rRNA REGION ANALYSIS IN THE TAXONOMY OF PHYTOPATHOGENIC BACTERIA BELONGS TO THE GENERA *ERWINIA* AND *PECTOBACTERIUM*"

Yuriy Rud – Candidate of Biological Sciences, Senior Researcher, Institute of fisheries of the NAAS of Ukraine – "RNA-VIRUSES AND HIGH MORTALITY ON RIVER-BASED TROUT FARMS IN UKRAINE"

Oksana Brovarska – Candidate of Biological Sciences, Senior Researcher, IMV NAS of Ukraine – "CHARACTERISTICS OF GLYCOPOLYMERS OF *STENOTROPHOMONAS RHIZOPHILA*, REPRESENTATIVE OF ANTARCTIC"

Olena Gudzenko – Candidate of Biological Sciences, Senior Researcher, IMV NAS of Ukraine – "PROTEASE PRODUCERS AMONG REPRESENTATIVES OF THE GENUS *BACILLUS* ISOLATED FROM THE COASTAL ZONE OF THE KINBURN SPLIT"

12.10 – 12.40 **Poster Session**

12.40 – 13:00 **Lunch break**

13:00 – 17:15 **The Youth Session**

Moderators: Mariia Loboda – PhD, Research Fellow

Marichka Zlatohurska – Candidate of Biological Sciences, Research Fellow

Mariia Loboda – PhD, Research Fellow, the Department of General and Soil Microbiology, IMV NAS of Ukraine – "PLANT IMMUNITY PROMOTION VIA SALICYLIC AND JASMONIC ACIDS BIOSYNTHESIS INDUCTION BY STREPTOMYCETES' METABOLITES"

Iryna Bida – PhD student, the Department of Biology of Extremophilic Microorganisms, IMV NAS of Ukraine – "PRECIPITATION OF COBALT AND NICKEL SOLUBLE COMPOUNDS BY SULFIDOGENIC BACTERIA OF BIOHUMUS"

Mykola Reshetnikov – PhD student, the Department of Phytopathogenic Bacteria, IMV NAS of Ukraine – "MICROORGANISMS-ANTAGONISTS OF BACTERIAL INFECTIONS OF SORYZ (*SORGHUM ORYZIUM*)"

Andrii Zaremba – PhD student, the Department of Virus Reproduction, IMV NAS of Ukraine – "3D STRUCTURE DATA VALIDATION OF THE SARS-COV-2 PROTEIN E TRANSMEMBRANE DOMAIN PENTAMER FORM AS A POTENTIAL TARGET FOR DRUG DEVELOPMENT"

Anastasia Matvienko – student, ESC "Institute of Biology and Medicine", Taras Shevchenko National University of Kyiv – "CHITINASE AND LAMINARINASE ACTIVITIES SOME FUNGI OF *TRICHODERMA* GENUS UNDER CULTIVATION ON NATURAL SUBSTRATES"

Oleksandra Pidkurhanna – PhD student, Institute of Food Biotechnology and Genomics of NAS of Ukraine – "THE PLASMID CONSTRUCTION FOR *SACCHAROMYCES CEREVISIAE* GENOME EDITING WITH CRISPR/CAS9"

Oleksandra Kolesnyk – PhD student, Uzhhorod National University – "ANTIBIOTIC RESISTANCE IN MICROBIAL ASSOCIATIONS OF COMPLICATED GUNSHOT INJURIES"

Semen Kyrylov – engineer, the Department of Biology of Extremophilic Microorganisms, IMV NAS of Ukraine – "ANAEROBIC DEGRADATION OF *ARTEMISIA ABSINTHIUM* TO PRODUCE BIOMETHANE AND DETOXYFY TOXIC COPPER COMPOUNDS"

15:00 – 15:15

Coffee break

Marichka Zlatohurska – Candidate of Biological Sciences, Research Fellow, the Department of Bacteriophage Molecular Genetics, IMV NAS of Ukraine – "STRUCTURAL CHARACTERIZATION OF PHAGE PHI812 HEAD ASSEMBLY IN *STAPHYLOCOCCUS AUREUS* CELLS"

Valeria Novalska – engineer I category, the Department of Phytopathogenic Bacteria, IMV NAS of Ukraine – "STUDY OF THE BIOLOGICAL PROPERTIES OF BACTERIAL PATHOGENS OF LENTILS IN UKRAINE"

Anna Tolokonova – student, ESC "Institute of Biology and Medicine", Taras Shevchenko National University of Kyiv – "DISSOCIATION IN *CURTOBACTERIUM FLACCUMFACIENS* PV. *FLACCUMFACIENS* DURING CULTURE PRESERVATION"

Mykola Zarudniak – PhD student, the Department of Phytopathogenic Bacteria, IMV NAS of Ukraine – «МОНІТОРИНГ І ФЕНОТИПОВІ ВЛАСТИВОСТІ ЗБУДНИКІВ БАКТЕРІАЛЬНИХ ХВОРОБ ГОРІХУ ВОЛОСЬКОГО»

Polina Zaremba – PhD student, the Department of Virus Reproduction, IMV NAS of Ukraine – "TOXICITY OF POLYHYDRATED FULLERENES WITH ANTI-INFLUENZA ACTIVITY IN BOTH IN VITRO AND IN VIVO SYSTEMS"

Mariia Dimova – PhD, Research Fellow, the Department of General and Soil Microbiology, IMV NAS of Ukraine, Institute of Soil and Biogeochemistry of Biology Centre CAS, South Bohemia University (Czech Republic) – "POTENTIAL METHANOTROPHIC ACTIVITY IN SALINE-ALKALINE LAKE"

Yana Maliarenko – engineer II category, the Department of Physiology of Industrial Microorganisms, IMV NAS of Ukraine – "ORGANIC ACIDS AND ACETOIN PRODUCTION BY LACTIC ACID BACTERIA DURING FERMENTATION OF DIFFERENT TYPES OF FLOUR"

Nadiia Shevchuk – leading engineer, the Department of General and Soil Microbiology, IMV NAS of Ukraine – "ENDOPHYTES AND THEIR POTENTIAL IN BIOTIC STRESSES MANAGEMENT AND CROP PRODUCTIVITY"

17:10 – 17:15

Closing remarks

Zoom link for remote participation:

<https://us06web.zoom.us/j/7744336892?pwd=VDh1RHQ3N3d6a3UvZFYyUko2ejR3Zz09>

Meeting ID: 774 433 6892

Passcode: 2023