

X International Antarctic Conference dedicated to the 25th Anniversary of raising of the National Flag of Ukraine at Ukrainian Antarctic Akademik Vernadsky station May 11–13, 2021 Kyiv, Ukraine

Х Міжнародна Антарктична конференція, присвячена 25-річчю підняття Державного прапора України на Українській антарктичній станції "Академік Вернадський" м. Київ, Україна 11-13 травня 2021 р.

May 11, 2021 Tuesday 09.00 – 13.20 UTC (Kyiv UTC + 3)

#### **ONLINE CONFERENCE**

Welcome and roll call	08.45-09.00
	UTC

#### **OPENING. PLENARY MEETING**

### Chairperson: Evgen Dykyi, Andriy Fedchuk

Welcome Addresses	09.00-09.40
	UTC
Evgen Dykyi	09.00-09.10
Director of the State Institution National Antarctic Scientific Center, Ministry of Education and	UTC
Science of Ukraine	
Serhiy Shkarlet	09.10-09.20
Minister of Education and Science of Ukraine	UTC
Roman Hryschuk	09.20-09.30
Member of the Committee of Education, Science and Innovation, the Verkhovna Rada of Ukraine	UTC
(Ukrainian Parliament)	
<u>Vitalii Tsymbaliuk</u>	09.30-09.40
Chargé d'Affaires of Ukraine to the Republic of Chile	UTC
Plenary reports:	09.40-13.20
	UTC
1 Azizan Abu Samah <sup>1</sup> , Nasaruddin Rahman <sup>2</sup>	09.40-10.00
<sup>1</sup> Founding Member, Sultan Mizan Antarctic Research Foundation, Kuala Lumpur, Malaysia;	UTC
<sup>2</sup> Chief Executive Officer, Sultan Mizan Antarctic Research Foundation, Kuala Lumpur,	
Malaysia	
MALAYSIAN STRATEGIES IN SUSTAINING POLAR RESEARCH: ROLE OF SULTAN	
MIZAN ANTARCTIC RESEARCH FOUNDATION	

2	Peter Convey	10.00-10.20
	British Antarctic Survey, Natural Environment Research Council, United Kingdom	UTC
	ISLANDS IN THE ICE: THE PAST, PRESENT AND FUTURE OF ANTARCTICA'S	
	UNIQUE TERRESTRIAL BIODIVERSITY	
3	Y.M Yampolski <sup>1</sup> , O.V. Koloskov <sup>1,2</sup> , O.V. Budanov <sup>1</sup>	10.20-10.40
	Institute of Radio Astronomy of National Academy of Sciences of Ukraine, Kharkiv,	UTC
	<sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv	
	LONG-TERM INVESTIGATIONS OF GLOBAL LIGHTNING ACTIVITY FROM THE	
	UKRAINIAN ANTARCTIC STATION (REVIEW)	
	CURRENT STATE AND PERSPECTIVE ON ANTARCTIC RESEARCH	10.40-11.00
	I.A. Kozeretska <sup>1</sup> , I.Yu. Parnikoza <sup>1,2</sup> , D, Pishniak <sup>1</sup> , V.M. Malanchuk <sup>1</sup> , E.O. Dykyi <sup>1</sup>	UTC
	<sup>1</sup> State Institution National Antarctic Scientific Center Ministry of Education and Science of	
	Ukraine, Kyiv. Ukraine	
	<sup>2</sup> Institute of Molecular Biology and Genetics, National Academy of Sciences of Ukraine	
	A.P. Fedchuk, V.V. Savchenko	11.00-11.20
	State Institution National Antarctic Scientific Center, Kyiv, Ukraine	UTC
	THE ROLE OF AKADEMIK VERNADSKY STATION IN THE DEVELOPMENT OF	
	UKRAINE IN THE ANTARCTIC TREATY SYSTEM	
	I.Yu. Parnikoza <sup>1,2</sup> , H.V. Yevchun <sup>1</sup> , A.P. Fedchuk <sup>1</sup>	11.20-11.40
	State Institution National Antarctic Scientific Center, Ministry of Education and Science of	UTC
	Ukraine, Kyiv	
	<sup>2</sup> Institute of Molecular Biology and Genetics, National Academy of Sciences of Ukraine, Kyiv	
	SYSTEMATIC CONSERVATION PLANNING FOR THE NEW PROPOSED	
	ANTARCTIC SPECIALLY PROTECTED AREA "ARGENTINE ISLANDS AND KYIV	
_	PENINSULA REGION"	
	D.V. Cheberkus	11.40-12.00
	State Institution National Antarctic Scientific Center, Ministry of Education and Science of	UTC
	Ukraine, Kyiv	
	BIBLIOMETRIC ANALYSIS OF UKRAINIAN ANTARCTIC RESEARCH PROGRAM	
	2011-2020	
	V.M. Malanchuk, O.V. Denysiuk, <u>O.M. Pnyovska</u>	12.00-12.20
	State Institution National Antarctic Scientific Center, Ministry of Education and Science of	UTC
	Ukraine, Kyiv	
	OPTIMIZATION OF EDITORIAL AND PUBLISHING PROCESS OF SCIENTIFIC	
	PROFESSIONAL EDITION "UKRAINIAN ANTARCTIC JOURNAL"	10.00.10.40
	SR. Zhang <sup>1</sup> , A.J. Coster <sup>1</sup> , L.P. Goncharenko <sup>1</sup> , P.J. Erickson <sup>1</sup> , E. Aa <sup>1</sup> , A.V. Zalizovski <sup>2,3</sup> ,	12.20-12.40
	A.V. Koloskov <sup>2,4</sup> , Y.M. Yampolski <sup>2</sup> , E.M. Zanimonsky <sup>2</sup> , T. Dang <sup>5</sup> , J. Lei <sup>5</sup> , W. Wang <sup>6</sup>	UTC
	Haystack Observatory, Massachusetts Institute of Technology, Westford, MA, USA	
	Institute of Radio Astronomy of NAS of Ukraine, Kharkiv	
	<sup>3</sup> Space Research Centre of Polish Academy of Sciences, Warsaw, Poland <sup>4</sup> State Institution National Automatic Sciences of Physician and Science of	
	4 State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv <sup>5</sup> CAS Key Laboratory of Geospace Environment, University of Science and Technology of	
	China, Hefei, China <sup>6</sup> High Altitude Observatory, National Center for Atmospheric Research, Boulder, CO, USA	
	GEOSPACE IMPACT OF THE 2021 SOLAR ECLIPSES IN POLAR REGIONS	
	Ari S. Friedlaender	12.40-13.00
-	Institute for Marine Sciences, Department of Ocean Sciences, University of California Santa	UTC
	Cruz, USA	OIC
	FORAGING ECOLOGY AND POPULATION DEMOGRAPHY OF RECOVERING	
	HUMPBACK WHALES AROUND THE ANTARCTIC PENINSULA: A MULTI-	
	NATIONAL, COLLABORATIVE RESEARCH PROGRAM	
	D. Bromwich	13.00-13.20
	The Ohio State University, Ohio, USA	13.00-13.20 UTC
	AN OVERVIEW OF THE YEAR OF POLAR PREDICTION IN THE SOUTHERN	OIC
	HEMISPHERE (YOPP-SH) AND ITS ACHIEVEMENTS	
	HEMISPHERE (YOPP-SH) AND ITS ACHIEVEMENTS	

May 12, 2021 Wednesday 06.00 – 15.40 UTC (Kyiv UTC + 3)

### LIFE SCIENCES SESSION

## Chairpersons: Ivan Parnikoza, Iryna Kozeretska

1	S.A. Ahmad <sup>1</sup> , C. Gomez-Fuentes <sup>2</sup> , A. Zulkharnain <sup>3</sup> , P. Convey <sup>4</sup>	06.00-06.20
	<sup>1</sup> Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti	UTC
	Putra Malaysia, Selangor, Malaysia	
	<sup>2</sup> Department of Chemical Engineering, Universidad de Magallanes, Punta Arenas, Chile	
	<sup>3</sup> Department of Bioscience and Engineering, College of Systems Engineering and Science,	
	Shibaura Institute of Technology, Saitama, Japan	
	<sup>4</sup> British Antarctic Survey, NERC, Cambridge, UK	
	THE APPLICATION OF ANTARCTIC MICROORGANISM ON HYDROCARBON	
	BIOREMEDIATION PROCESS	
2	S.U. Aminu <sup>1</sup> , F. Merican <sup>1</sup> , W.O. Wan Maznah <sup>1</sup> , P. Broady <sup>2</sup> , P. Convey <sup>3</sup>	06.20-06.40
	<sup>1</sup> School of Biological Sciences, Universiti Sains Malaysia, Penang, Malaysia	UTC
	<sup>2</sup> School of Biological Sciences University of Canterbury New Zealand	
	<sup>3</sup> British Antarctic Survey, NERC, Cambridge, UK	
	ANTARCTIC CYANOBACTERIA RESPONSE TO SALT STRESS	
3	S. Darham <sup>1</sup> , S.A. Ahmad <sup>1</sup> , A. Zulkharnain <sup>2</sup> , S. Sabri <sup>3</sup> , C. Gomez-Fuentes <sup>4</sup> , K.A. Khalil <sup>5</sup> , P.	06.40-07.00
	Convey <sup>6</sup>	UTC
	<sup>1</sup> Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti	
	Putra Malaysia, Selangor, Malaysia	
	<sup>2</sup> Department of Bioscience and Engineering, College of Systems Engineering and Science,	
	Shibaura Institute of Technology, Saitama, Japan	
	<sup>3</sup> Department of Microbiology, Faculty of Biotechnology and Biomolecular Sciences, Universiti	
	Putra Malaysia, Selangor, Malaysia	
	<sup>4</sup> Department of Chemical Engineering, Universidad de Magallanes, Punta Arenas, Chile	
	<sup>5</sup> School of Biology, Faculty of Applied Sciences, Universiti Teknologi MARA, Selangor,	
	Malaysia	
	<sup>6</sup> British Antarctic Survey, NERC, Cambridge, UK	
	STATISTICAL OPTIMISATION OF MOLYBDENUM REDUCTION USING	
	PSYCHROTOLERANT MARINE BACTERIA ISOLATED FROM ANTARCTICA	
4	R. Radzi <sup>1</sup> , P. Broady <sup>2</sup> , P. Convey <sup>3</sup> , W. M. W. Omar <sup>1</sup> , F. Merican <sup>1</sup>	07.00-07.20
	<sup>1</sup> School of Biological Science, Universiti Sains Malaysia, Penang, Malaysia	UTC
	<sup>2</sup> Biological Science, University of Canterbury, Christchurch, New Zealand	
	<sup>3</sup> British Antarctic Survey, NERC, Cambridge, United Kingdom	
	DIVERSITY OF TERRESTRIAL CYANOBACTERIA FROM SELECTED HABITATS ON	
	SIGNY ISLAND, SOUTH ORKNEY ISLANDS, ANTARCTICA	
5	A.F.A. Roslee <sup>1</sup> , S.A. Ahmad <sup>1</sup> , C. Gomez-Fuentes <sup>2</sup> , A. Zulkharnain <sup>3</sup> , N.A. Shaharuddin <sup>1</sup> , K.A.	07.20-07.40
	Khalil <sup>4</sup> , P. Convey <sup>5</sup>	UTC
	<sup>1</sup> Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences,	
	Universiti Putra Malaysia, Selangor, Malaysia	
	<sup>2</sup> Department of Chemical Engineering, Universidad de Magallanes, Punta Arenas, Chile.	

	$^{3}$ D	
	<sup>3</sup> Department of Bioscience and Engineering, College of Systems Engineering and Science,	
	Shibaura Institute of Technology, Saitama, Japan  45 shoot of Biology, Frankty of Applied Sciences, University Televology MARA, Salanger	
	<sup>4</sup> School of Biology, Faculty of Applied Sciences, Universiti Teknologi MARA, Selangor,	
	Malaysia. 5 Priisish Antanatia Survey, NEPC, Cambridge, United Vinadom	
	<sup>5</sup> British Antarctic Survey, NERC, Cambridge, United Kingdom GROWTH OPTIMISATION AND KINETIC PROFILING OF DIESEL	
	GROWTH OPTIMISATION AND KINETIC PROFILING OF DIESEL BIODEGRADATION BY A COLD–ADAPTED BACTERIAL CONSORTIUM ISOLATED	
6	FROM TRINITY PENINSULA, ANTARCTICA  K. Sato <sup>1</sup> , S.A. Ahmad <sup>2</sup> , A. Zulkharnain <sup>1</sup>	07.40-08.00
0		07.40-08.00 UTC
	<sup>1</sup> Department of Bioscience and Engineering, College of Systems Engineering and Science, Shibaura Institute of Technology, Saitama, Japan	UIC
	<sup>2</sup> Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti	
	Putra Malaysia, Selangor, Malaysia	
	ISOLATION OF POLYLACTIC ACID (PLA)-DEGRADING BACTERIUM FROM	
	ANTARCTIC SOIL	
7	K.N.M. Zahri <sup>1</sup> , S.A. Ahmad <sup>1</sup> , S. Sabri <sup>2</sup> , A. Zulkharnain <sup>3</sup> , C. Gomez-Fuentes <sup>4</sup> , K.A. Khalil <sup>5</sup> , P.	08.00-08.20
/	Convey <sup>6</sup>	UTC
	<sup>1</sup> Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti	UIC
	Putra Malaysia, Selangor, Malaysia	
	<sup>2</sup> Department of Microbiology, Faculty of Biotechnology and Biomolecular Sciences, Universiti	
	Putra Malay-sia, Selangor, Malaysia.	
	<sup>3</sup> Department of Bioscience and Engineering, College of Systems Engineering and Science,	
	Shibaura Institute of Technology, Saitama, Japan.	
	<sup>4</sup> Department of Chemical Engineering, Universidad de Magallanes, Punta Arenas, Chile	
	<sup>5</sup> School of Biology, Faculty of Applied Sciences, Universiti Teknologi MARA, Selangor,	
	Malaysia.	
	<sup>6</sup> British Antarctic Survey, NERC, Cambridge, UK	
	BIODEGRADATION OF WASTE CANOLA OIL (WCO) AND PURE CANOLA OIL (PCO)	
	BY AN ANTARCTIC BACTERIAL COMMUNITY	
8	N.N. Zakaria <sup>1</sup> , S.A. Ahmad <sup>1</sup> , C. Gomez-Fuentes <sup>2</sup> , A. Zulkharnain <sup>3</sup> , S. Sabri <sup>4</sup> , N.A.	08.20-08.40
	Shaharuddin <sup>5</sup> , P. Convey <sup>6</sup>	UTC
	<sup>1</sup> Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti	
	Putra Malaysia, , Selangor, Malaysia	
	<sup>2</sup> Department of Chemical Engineering, Universidad de Magallanes, Punta Arenas, Chile.	
	<sup>3</sup> Department of Bioscience and Engineering, College of Systems Engineering and Science,	
	Shibaura Institute of Technology, Saitama, Japan	
	<sup>4</sup> Department of Microbiology, Faculty of Biotechnology and Biomolecular Sciences, Universiti	
	Putra Malaysia, Selangor, Malaysia	
	<sup>5</sup> British Antarctic Survey, NERC, Cambridge, UK	
	HYDROCARBON-DEGRADING BACTERIAL COMMUNITY PRESENT IN NON-	
-	CONTAMINATED ANTARCTIC SEAWATER	
9	Syazana Zaki <sup>1</sup> , Faradina Merican <sup>1</sup> , Narongrit Muangmai <sup>2</sup> , Peter Convey <sup>3</sup> , Paul Broady <sup>4</sup>	
	School of Biological Science, Universiti Sains Malaysia, Penang, Malaysia	
	<sup>2</sup> Department of Fishery Biology, Faculty of Fisheries, Kasetsart University, Chatuchak,	00 40 00 00
	Bangkok, Thailand  3 Printiple Antangaia Surreau NERC Combridge United Vine dom	08.40-09.00
	<sup>3</sup> British Antarctic Survey, NERC, Cambridge, United Kingdom <sup>4</sup> School of Piological Sciences, University of Canterbury, Christopyreh, New Zogland	UTC
	<sup>4</sup> School of Biological Sciences, University of Canterbury, Christchurch, New Zealand THE FIRST DISCOVERY OF TOXIN PRODUCING WILMOTTIA MURRAYI FROM	
	CRYOPRESERVED ANTARCTIC CYANOBACTERIAL MATS	
10	K. Subramaniam <sup>1</sup> , S.A. Ahmad <sup>1</sup> , N.A. Shaharuddin <sup>1</sup> , A. Zulkharnain <sup>2</sup> , K.A. Khalil <sup>3</sup> , P. Convey <sup>4</sup>	
10	Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti	
	Putra Malaysia, Selangor, Malaysia	
	<sup>2</sup> Department of Bioscience and Engineering, College of Systems Engineering and Science,	
	Shibaura Institute Technology, Saitama, Japan	09.00-09.20
	<sup>3</sup> Department of Biomolecular Sciences, Faculty of Applied Sciences, Universiti Teknologi	UTC
	MARA, Selangor, Malaysia	
	<sup>4</sup> British Antarctic Survey, NERC, Cambridge,UK	
	DEVELOPMENT OF A DEFINED MIXED CULTURE (DMC) SYSTEM FOR EFFECTIVE	
	REMEDIATION OF PHENOL AT LOW TEMPERATURE	
11	N. Mohamad-Fauzi <sup>1,2,4</sup> , H.J. Wong <sup>2,3</sup> , H. Goh <sup>5</sup> , J. Smykla <sup>6</sup> , S.A. Alias <sup>2,4</sup>	09.20-09.40
	<sup>1</sup> Institute of Biological Sciences, Universiti Malaya, Kuala Lumpur, Malaysia	UTC

	<sup>2</sup> Institute of Ocean & Earth Sciences, Institute for Advanced Studies, Universiti Malaya, Kuala	
	Lumpur, Malaysia	
	<sup>3</sup> Institute for Advanced Studies, Universiti Malaya, Kuala Lumpur, Malaysia	
	<sup>4</sup> National Antarctic Research Centre, Institute for Advanced Studies, Universiti Malaya, Kuala	
	Lumpur, Malaysia	
	<sup>5</sup> Institute of Systems Biology, Universiti Kebangsaan Malaysia, Selangor Darul Ehsan,	
	Malaysia	
	<sup>6</sup> Institute of Nature Conservation, Polish Academy of Sciences, Kraków, Poland	
	TRANSCRIPTIONAL RESPONSE IN POLAR PSEUDOGYMNOASCUS SPP. SOIL	
10	FUNGI FOLLOWING THERMAL CHALLENGE	
12	M. Rizman-Idid, H.J. Wong <sup>2</sup> , N. Mohamad-Fauzi, P. Convey, J. Smykla, S.A. Alias <i>Institute of Ocean and Earth Sciences, University of Malaya, Kuala Lumpur, Malaysia</i>	00 40 10 00
	MOLECULAR IDENTIFICATION OF <i>PSEUDOGYMNOASCUS</i> SPP. ISOLATED FROM	09.40-10.00 UTC
	ARCTIC AND ANTARCTIC REGIONS	UIC
13	C.M.V.L Wong <sup>1</sup> , N.A Yusof <sup>1</sup> , A.M.A Murad <sup>2</sup> , F.D. Abu Bakar <sup>2</sup> , N.M. Mahadi <sup>3</sup> , A.Y.A	
13	Rahman <sup>4</sup> , N. Zainuddin, N. Najimudin <sup>4</sup>	
	<sup>1</sup> Biotechnology Research Institute, Universiti Malaysia Sabah, Jalan UMS, Sabah, Malaysia	
	<sup>2</sup> School of Biosciences and Biotechnology, Faculty of Science and Technology, Universiti	
	Kebangsaan Malaysia, Selangor, Malaysia	10.00-10.20
	<sup>3</sup> Malaysia Genome Institute, Selangor Darul Ehsan, Malaysia	UTC
	4School of Biological Sciences, Universiti Sains Malaysia, Penang, Malaysia	
	MOLECULAR CHAPERONES HELP ANTARCTIC PSYCHROPHILIC YEAST,	
	Glaciozyma antarctica PI12 TO COPE WITH HEAT STRESS	
14	Nur Hidayu Syuhada <sup>1</sup> , Paul A. Broady <sup>2</sup> , Peter Convey <sup>3</sup> , Faradina Merican <sup>1</sup>	
* '	<sup>1</sup> School of Biological Science, Universiti Sains Malaysia	
	<sup>2</sup> School of Biological Sciences, University of Canterbury	10.20-10.40
	<sup>3</sup> British Antarctic Survey, Cambridge	UTC
	STRONG AND WIDESPREAD CYCLOHEXIMIDE RESISTANCE IN THE EUKARYOTIC	
	ALGAL GENUS Stichococcus	
15	D.V. Lukashov, T.S. Tesolkina	
	Taras Shevchenko National University of Kyiv, Kyiv	10.40-11.00
	FUNCTIONAL FEATURES OF BIOGEOCHEMICAL MIGRATION SYSTEM OF TOXIC	UTC
	CHEMICAL ELEMENTS IN TERRESTRIAL ECOSYSTEMS OF GALINDEZ ISLAND	
16	A.Ye. Berezkina <sup>1,2</sup> , M.A. Kharkhota <sup>3</sup> , L.D. Varbanets <sup>3</sup> , K.V. Avdiuk <sup>3</sup> , O.V. Gudzenko <sup>3</sup> , M.Yu.	
	Gorpynchenko, A.Yu. Utevsky <sup>1,2</sup>	
	<sup>1</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv	11.00-11.20
	<sup>2</sup> V.N. Karazin Kharkiv National University, Kharkiv	UTC
	<sup>3</sup> D.K. Zabolotny Institute of Microbiology and Virology of the NAS of Ukraine, Kyiv	
	PHYLOGENETIC RELATIONSHIPS OF THE GENUS PSEUDOALTEROMONAS,	
177	PSYCHROMONAS AND OCEANOBACILLUS IN THE POLAR REGIONS	
17	O. M. Gromyko <sup>1</sup> , S.I. Tistechok <sup>1</sup> , I.I. Roman <sup>1</sup> , O.V. Aravitska <sup>1</sup> , A.M. Luzhetskyy <sup>3</sup> , I.Y.	
	Parnikoza <sup>2</sup> , V.O. Fedorenko <sup>1</sup> <sup>1</sup> Ivan Franko National University of Lviv; Lviv	
	<sup>2</sup> National Antarctic Sientific Center of the Ministry of Education and Science of Ukraine,	
	Institute of Molecular biology and Genetic NAS of Ukraine, Kyiv	11.20-11.40
	<sup>3</sup> Saarland University, Saarbrücken, Germany	UTC
	ACTINOBACTERIA ASSOCIATED WITH <i>Polytrichum strictum</i> FROM GALINDEZ	
	ISLAND (MARITIME ANTARCTIC): DIVERSITY, PROPERTIES AND	
	BITECHOLOGICAL POTENTIAL	
18	O. Sinna <sup>1</sup> , V. Popov <sup>1</sup> , N. Efimova <sup>2</sup> , G. Yukhno <sup>2</sup> , A. Krasnopyorova <sup>2</sup> , D. Shmyrov <sup>3</sup> , A.	
	Utevsky <sup>1,3</sup>	
	<sup>1</sup> V. N. Karazin Kharkiv National University, Kharkiv	
	<sup>2</sup> Research Institute of Chemistry, V. N. Karazin Kharkiv National University, Kharkiv	11 40 12 00
	<sup>3</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	11.40-12.00
	Ukraine, Kyiv	UTC
	GIS AND CARTOGRAPHIC SUPPORT OF THE CHEMICAL COMPOSITION	
	RESEARCH OF THE BOTTOM SEDIMENTS OF THE ARGENTINE ISLANDS` WATER	
	AREA	
19	Nataliia Raksha, Tetiana Halenova, Tetiana Vovk, Olexiy Savchuk, Ludmila Ostapchenko	12.00-12.20
	ESC "Institute of Biology and Medicine", Taras Shevchenko National University of Kyiv	12.00-12.20 UTC
	ANTIOXIDANT PEPTIDES DERIVED FROM THE ANTARCTIC HYDROBIONTS	
	ANTIOMETER TELES PERTYED I ROW THE ANTARCHE HIDRODIONIS	

20	Kuzmina T.A. <sup>1</sup> , Salganskij O.O. <sup>2</sup> , Dykyj I.V. <sup>3</sup> , Lisitsyna O.L. <sup>1</sup> , Korol E.M. <sup>4</sup> , Kuzmin Y.I. <sup>1</sup>	
	<sup>1</sup> I. I. Schmalhausen Institute of Zoology NAS of Ukraine, Kyiv	
	<sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv	12.20-12.40
	<sup>3</sup> Zoological museum of Lviv National University, Lviv	UTC
	<sup>4</sup> National Museum of Natural History NAS of Ukraine, Kyiv	
	SPECIES DIVERSITY OF THE PARASITE COMMUNITIES OF BONY FISHES FROM	
	THE ARGENTINE ISLAND REGION, WEST ANTARCTICA	
21	A.Yu. Utevsky <sup>1,2</sup> , S.Yu. Utevsky <sup>1</sup>	
	<sup>1</sup> V.N. Karazin Kharkiv National University, Kharkiv, Ukraine	12 10 12 00
	<sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	12.40-13.00
	Ukraine, Kyiv	UTC
	BIPOLAR DISTRIBUTION IN FISH PARASITES OF ANTARCTICA	
22	S. Y. Komplikevych, I. I. Hruna, O. D. Maslovska, T. B. Peretyatko, O. M. Moroz, S. O.	
22	Hnatush	
	Ivan Franko National University of Lviv, Lviv	13.00-13.20
	BACTERIA OF THE GENUS <i>PSEUDOMONAS</i> ISOLATED FROM ANTARCTIC	UTC
	BIOTOPES	
23	Kovalenko P.A. <sup>1</sup> , Serga S.V. <sup>2,3</sup> , Salganskiy O.O. <sup>4</sup> , Kozeretska I.A. <sup>3</sup>	
۷3	Institute for evolutionary ecology NAS Ukraine, Kyiv	
	<sup>2</sup> Taras Shevchenko National University of Kyiv, Kyiv	
	<sup>3</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	12 20 12 40
		13.20-13.40 UTC
	Ukraine, Kyiv  4 National University of Life and Environmental Sciences of Ukraine, Kyiv	UIC
	<sup>4</sup> National University of Life and Environmental Sciences of Ukraine, Kyiv	
	ANALYSIS OF mtDNA HAPLOTYPES IN BELGICA ANTARCTICA JACOBS (DIPTERA,	
2.4	CHIRONOMIDAE) POPULATIONS	
24	I.O. Andreev <sup>1</sup> , I.I. Konvalyuk <sup>1</sup> , I.Yu. Parnikoza <sup>1,2</sup> , M.O. Pavlovska <sup>2</sup> , I.A. Kozeretska <sup>2</sup> ,	
	V.A. Kunakh <sup>1</sup>	
	<sup>1</sup> Institute of Molecular Biology and Genetics, National Academy of Sciences of Ukraine, Kyiv	13.40-14.00
	<sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	UTC
	Ukraine, Kyiv	
	MOLECULAR-GENETIC ANALYSIS OF <i>COLOBANTHUS QUITENSIS</i> POPULATIONS	
2.5	FROM ARGENTINE ISLANDS REGION USING RETROTRANSPOSON MARKERS	
25	O.O.Poronnik <sup>1</sup> , Ie.P.Prekrasna <sup>2</sup> , V.Yu.Ivanets <sup>2</sup> , I.Yu.Parnikoza <sup>2,1</sup> , G.Yu.Myryuta <sup>1</sup> ,	
	V.A.Kunakh <sup>1</sup>	
	<sup>1</sup> Institute of Molecular Biology and Genetics, National Academy of Sciences of Ukraine, Kyiv	14.00-14.20
	<sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	UTC
	Ukraine, Kyiv	
	IN VITRO CLONAL PROPAGATION OF COLOBANTHUS QUITENSIS FROM THE	
	MARITIME ANTARCTICA	
26	R.V. Ivannikov <sup>1</sup> , I.V. Laguta <sup>2</sup> , O.M. Stavynska <sup>2</sup> , P.O. Kuzema <sup>2</sup> , V.M. Anishchenko <sup>1</sup> ,	
	I.Yu. Parnikoza <sup>3</sup> , O.O. Poronnik <sup>4</sup> , G. Yu. Myryuta <sup>4</sup> , V.A. Kunakh <sup>4</sup>	
	<sup>1</sup> M.M. Gryshko National Botanic Garden, National Academy of Sciences of Ukraine, Kyiv	
	<sup>2</sup> Chuiko Institute of Surface Chemistry, National Academy of Sciences of Ukraine	14.20-14.40
	<sup>3</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	UTC
	Ukraine, Kyiv	010
	<sup>4</sup> Institute of Molecular Biology and Genetics, National Academy of Sciences of Ukraine, Kyiv	
	COMPARATIVE STUDY OF BIOLOGICALLY ACTIVE COMPOUNDS CONTENTS IN	
	DESCHAMPSIA ANTARCTICA PLANTS OF DIFFERENT ORIGIN	
27	I.I. Konvalyuk, M.O. Twardovska, L.P. Mozhylevska, I.O. Andreev, V.A. Kunakh	
	Institute of Molecular Biology and Genetics of National Academy of Sciences of Ukraine, Kyiv	14.40-15.00
	CALLUS FORMATION, ORGANOGENESIS AND PLANT REGENERATION IN VITRO	UTC
	OF DESCHAMPSIA ANTARCTICA	
28	N. Miryuta <sup>1</sup> , I. Parnikoza <sup>1,2</sup> , O. Poronnik <sup>2,1</sup> , G. Myryuta <sup>1,2</sup> , M. Rojek-Jelonek <sup>3</sup> , E. Dykyi <sup>1</sup> ,	
	V. Kunakh <sup>2</sup>	
	<sup>1</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv	15.00-15.20
	<sup>2</sup> Institute of Molecular Biology and Genetics, National Academy of Sciences of Ukraine, Kyiv	UTC
	<sup>3</sup> University of Silesia in Katowice, Katowice, Poland	
	CORRELATION MODELS OF ADAPTABILITY DESCHAMPSIA ANTARCTICA	
	GENOTYPES OF DIFFERENT ORIGIN GROWN UNDER IN VITRO CONDITION	
29	Twardovska M.O. <sup>1</sup> , Konvalyuk I.I. <sup>1</sup> , Lystvan K.V. <sup>2</sup> , Andreev I.O. <sup>1</sup> , Kunakh V.A. <sup>1</sup>	15.20-15.40
/		10.20 10.10

<sup>1</sup> Institute of Molecular Biology and Genetics of NAS of Ukraine, Kyiv	UTC
<sup>2</sup> Institute of Cell Biology and Genetic, Engineering of NAS of Ukraine, Kyiv	
COMPARATIVE ANALYSIS OF THE CONTENT OF BIOLOGICALLY ACTIVE	
COMPOUNDS IN INTACT PLANTS AND TISSUE CULTURE OF DESCHAMPSIA	
ANTARCTICA E. DESV.	

May 13, 2021 Thursday 07.00 – 14.00 UTC (Kyiv UTC + 3)

### LIFE SCIENCES SESSION

# Chairpersons: Ivan Parnikoza, Iryna Kozeretska

1	O. Salgansky <sup>1</sup> , A. Dzhulai <sup>1</sup> , G. Milinevsky <sup>1,2,3</sup> , P. Khoyetskyy <sup>1,4</sup> , V. Smagol <sup>5</sup> , I. Dykyy <sup>1,6</sup> , A. Simon <sup>2</sup> , M. Telipska <sup>6</sup> , L. Pshenichnov <sup>7</sup> , O. Savitsky <sup>8</sup> , M. Veselskyi <sup>9</sup> , D. Lutsenko <sup>10</sup> <sup>1</sup> National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv, Ukraine <sup>2</sup> Taras Shevchenko National University of Kyiv, Kyiv, Ukraine <sup>3</sup> International Center of Future Science, College of Physics, Jilin University, Changchun, China <sup>4</sup> National Forestry University of Ukraine, Lviv, Ukraine <sup>5</sup> Schmalhausen Institute of Zoology of National Academy of Sciences of Ukraine, Kyiv, Ukraine <sup>6</sup> Ivan Franko National University of Lviv, Lviv, Ukraine <sup>7</sup> Institute of Fisheries and Marine Ecology, Berdyansk, Ukraine <sup>8</sup> Institute of Hydrobiology, National Academy of Sciences of Ukraine, Kyiv, Ukraine <sup>9</sup> Zhytomyr Regional Museum of Local Lore, Zhytomyr, Ukraine <sup>10</sup> Institute for Problems of Cryobiology and Cryomedicine of National Academy of Sciences of Ukraine, Kharkiv, Ukraine  GENTOO BREEDING CHRONOLOGY BY CEMP CAMERAS - VALIDATION EXPERIMENT	07.00-07.20 UTC
2	J. Ivanchikova <sup>1,2</sup> K. Vyshnyakova <sup>1,3</sup> <sup>1</sup> Scientific Research Institution Ukrainian Scientific Centre of Ecology of the Sea, Ministry of Ecology and Natural Resources of Ukraine, Odesa, Ukraine <sup>2</sup> I.I. Schmalhausen Institute of Zoology of National Academy of Sciences of Ukraine <sup>3</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv, Ukraine PHOTO-IDENTIFICATION STUDY OF HUMPBACK WHALES (MEGAPTERA NOVAEANGLIAE) NEAR THE SOUTHERN ORKNEY ISLANDS DURING AUSTRALIAN SUMMER 2020-2021	07.20-07.40 UTC
3	K. Vishnyakova <sup>1,2</sup> , J. Ivanchikova <sup>1,3</sup> Scientific Research Institution Ukrainian Scientific Centre of Ecology of the Sea, Ministry of Ecology and Natural Resources of Ukraine, Odesa, Ukraine  State Institution National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv, Ukraine  I.I. Schmalhausen Institute of Zoology of National Academy of Sciences of Ukraine, Kyiv, Ukraine  CETACEAN SPATIAL DISTRIBUTION NEAR THE SOUTHERN ORKNEY ISLANDS DURING ANTARCTIC KRILL FISHERY, AUSTRALIAN SUMMER 2020-2021	07.40-08.00 UTC

4	TVV D	00.00.00.20
4	V.V. Paramonov	08.00-08.20
	Institute of Fisheries and Marine Ecology, Berdyansk	UTC
	TEMPERATURE CONDITIONS OF DWELLING OF ANTARCTIC TOOTHFISH	
	(DISSOSTICHUS MAWSONI) IN ANTARCTICA (WEDDELL, ROSS AND AMUNDSEN	
-	SEAS).	00.20.00.40
5	B.V.Donskoi	08.20-08.40
	Institute of Pediatrics, Obstetrics and Gynecology, National Academy of Medical Sciences of	UTC
	Ukraine, Kyiv, Ukraine	
	STUDY OF THE STATE OF THE IMMUNE SYSTEM OF ANTARCTIC EXPEDITIONS	
_	MEMBERS	00.40.00.00
6	Ya.V. Pirko <sup>1</sup> , Yu.O. Bilonozhko <sup>1</sup> , A.M. Rabokon <sup>1</sup> , A.S. Postovoitova <sup>1</sup> , L.O. Kalafat <sup>1</sup> , I.Yu.	08.40-09.00
	Parnikoza <sup>2</sup> , I.A. Kozeretska <sup>2</sup> , Ya.B. Blume <sup>1</sup>	UTC
	<sup>1</sup> Institute of Food Biotechnology and Genomics of the National Academy of Sciences of Ukraine»,	
	Kyiv, Ukraine	
	<sup>2</sup> National Antarctic Scientific Center of the Ministry of Education and Science of Ukraine, Kyiv, Ukraine	
	ASSESSMENT OF COLOBANTHUS QUITENSIS GENETIC DIVERSITY IN THE ANTARCTIC BY ANALYSIS OF INTRON POLYMORPHISM OF CYTOSKELETON	
	PROTEIN GENES	
	PROTEIN GENES	09.00 - 13.15
	DOGGERDG	09.00 - 13.15 UTC
	POSTERS:	ore
1	N. Abu Bakar, B. Y. C. Lau, J. Smykla, S. A. Karsani and S. A. Alias	09.00-09.15
1	N. Adu Bakar, B. Y. C. Lau, J. Smykia, S. A. Karsam and S. A. Anas Institute of Ocean and Earth Sciences, Universiti Malaya, Kuala Lumpur, Malaysia	09.00-09.13 UTC
	HEAT STRESS RESPONSE OF PSEUDOGYMNOASCUS SPP. ISOLATED FROM	UIC
	DIFFERENT BIOGEOGRAPHIC REGIONS	
2		00 15 00 20
2	R.R. Wong <sup>1</sup> , S.A. Ahmad <sup>1</sup> , C. Gomez-Fuentes <sup>2</sup> , A. Zulkharnain <sup>3</sup> , S. Sabri <sup>4</sup> , C. K.A. Khalil <sup>5</sup>	09.15-09.30
	<sup>1</sup> Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti	UTC
	Putra Malaysia, Selangor, Malaysia	
	<sup>2</sup> Department of Chemical Engineering, Universidad de Magallanes, Punta Arenas, Chile	
	<sup>3</sup> Department of Bioscience and Engineering, College of Systems Engineering and Science,	
	Shibaura Institute of Technology, Saitama, Japan <sup>4</sup> Department of Microbiology, Faculty of Biotechnology and Biomolecular Sciences, Universiti	
	Putra Malaysia, Selangor, Malaysia.	
	<sup>5</sup> Department of Biomolecular Sciences, Faculty of Applied Sciences, Universiti Teknologi MARA,	
	Selangor, Malaysia	
	ANTARCTIC BACTERIAL CONSORTIUM DIESEL DEGRADATION OPTIMISATION VIA	
	STATISTICAL APPROACH	
3	T.A. Tengku-Mazuki <sup>1</sup> , S.A. Ahmad <sup>1</sup> , N.A. Shaharuddin <sup>1</sup> , P. Convey <sup>2</sup> , A. Zulkharnain <sup>3</sup> , C. Gomez-	09.30-09.45
5	Fuentes <sup>4</sup>	UTC
	<sup>1</sup> Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti	010
	Putra Malaysia, Selangor, Malaysia	
	<sup>2</sup> British Antarctic Survey, NERC, Cambridge, United Kingdom	
	<sup>3</sup> Department of Bioscience and Engineering, College of Systems Engineering and Science,	
	Shibaura Institute Technology, Saitama, Japan.	
	<sup>4</sup> Department of Chemical Engineering, Universidad de Magallanes, Punta Arenas, Chile	
	EFFECT OF HEAVY METALS ON PHENOL DEGRADATION BY AN ANTARCTIC	
	BACTERIAL CONSORTIUM	
4	G. Verasoundarapandian <sup>1</sup> , CY. Wong <sup>2</sup> , S.A. Ahmad <sup>1</sup>	09.45-10.00
	Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti	UTC
	Putra Malaysia, Selangor, Malaysia	
	<sup>2</sup> School of Health Sciences, International Medical University, Kuala Lumpur, Malaysia	
	GROWTH EVALUATION OF ANTARCTIC FILAMENTOUS ALGAE IN MOLYBDENUM	
	AS HEAVY METAL	
5	O. Salgansky <sup>1</sup> , A. Dzhulai <sup>1</sup> , <u>G. Milinevsky<sup>1,2,3</sup></u> , P. Khoyetskyy <sup>1,4</sup> , V. Smagol <sup>5</sup> , I. Dykyy <sup>1,6</sup> ,	10.00-10.15
	A. Simon <sup>2</sup> , M. Telipska <sup>6</sup> , L. Pshenichnov <sup>7</sup> , O. Savitsky <sup>8</sup> , M. Veselskyi <sup>9</sup> , D. Lutsenko <sup>10</sup>	UTC
	<sup>1</sup> National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv,	
	· · · · · · · · · · · · · · · · · · ·	
	Ukraine	
	Ukraine <sup>2</sup> Taras Shevchenko National University of Kyiv, Kyiv, Ukraine	
	<sup>2</sup> Taras Shevchenko National University of Kyiv, Kyiv, Ukraine	

	<sup>5</sup> Schmalhausen Institute of Zoology of National Academy of Sciences of Ukraine, Kyiv, Ukraine	
	<sup>6</sup> Ivan Franko National University of Lviv, Lviv, Ukraine	
	<sup>7</sup> Institute of Fisheries and Marine Ecology, Berdyansk, Ukraine	
	<sup>8</sup> Institute of Hydrobiology, National Academy of Sciences of Ukraine, Kyiv, Ukraine	
	<sup>9</sup> Zhytomyr Regional Museum of Local Lore, Zhytomyr, Ukraine	
	<sup>10</sup> Institute for Problems of Cryobiology and Cryomedicine of National Academy of Sciences of	
	Ukraine, Kharkiv, Ukraine	
	ESTABLISHING A CEMP CAMERA NETWORK IN ANTARCTIC PENINSULA: PROJECT	
	RESULTS	
6	Ivanets V. <sup>1</sup> , Miryuta N. <sup>1</sup> , Yevchun A. <sup>1,2</sup> , Pilipenko D. <sup>1</sup> , Salgansky O. <sup>1,3</sup> , Veselsky M. <sup>4</sup> , Kozeretska	10.15-10.30
	I. <sup>1</sup> , Dykyi E. <sup>1</sup> , Parnikoza I. <sup>1,2,5,6</sup>	UTC
	<sup>1</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	010
	Ukraine, Kyiv	
	<sup>2</sup> National University of «Kyiv-Mohyla Academy», Kyiv	
	<sup>3</sup> National University of Life and Environmental Sciences of Ukraine, Kyiv	
	<sup>4</sup> Zhytomyr Regional Museum of Culture and Traditions, Zhytomyr	
	<sup>5</sup> Institute of Molecular Biology and Genetic, NAS of Ukraine, Kyiv	
	<sup>6</sup> National Historical and Architectural Museum «Kyiv Fortress», Kyiv	
	AN EXAMPLE OF ORNITHOCHORY: CATHARACTA MACCORMICKI IN THE REGION OF	
7	THE ARGENTINE ISLANDS, THE MARITIME ANTARCTIC Y.G. Giginyak, D.A. Lukashanets, O.I. Borodin, V.E. Myamin	10.30-10.45
/		
	State Scientific and Production Association "Scientific Research Center of the National Academy	UTC
	of Sciences of Belarus for Bioresources", Minsk, Belarus	
	TEMPERATURE SURVIVAL OF DAPHNIA (CTENODAPHNIA STUDERI (RUHE, 1914)	
	(ANOMOPODA, CRUSTACEA: CLADOCERA) FROM COASTAL LAKES AT LARSEMANN	
	OASIS (LARSEMANN HILLS, EAST ANTARCTICA)	10 17 11 00
8	O.M. Bublyk, I.O. Andreev, V.A. Kunakh	10.45-11.00
	Institute of Molecular Biology and Genetics of National Academy of Sciences of Ukraine, Kyiv	UTC
	BIOINFORMATIC ANALYSIS OF GENE PROMOTER OF	
	DESCHAMPSIA ANTARCTICA DaDREB2B STRESS-INDUCIBLE TRANSCRIPTION	
	FACTOR	
9	<u>Ie.P. Prekrasna<sup>1</sup></u> , M.O. Pavlovska <sup>1,3</sup> , V.Yu.Ivanets <sup>1</sup> , I.Yu. Parnikoza <sup>1,2</sup>	11.00-11.15
	<sup>1</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	UTC
	Ukraine, Kyiv, Ukraine;	
	<sup>2</sup> Institute of Molecular Biology and Genetics, National Academy of Sciences of Ukraine, Kyiv,	
	Ukraine;	
	<sup>3</sup> National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine	
	ENDOPHYTIC BACTERIAL COMMUNITIES' COMPOSITION OF ANTARCTIC	
	VASCULAR PLANTS DERIVED BY 16S rRNA METAGENOMICS	
10	M.O. Pavlovska <sup>1</sup> , Ie.P. Prekrasna <sup>1</sup> , A.O. Dzhulai <sup>1</sup> , A.B. Zotov <sup>1</sup> , E.O. Dykyi <sup>1</sup>	11.15-11.30
	<sup>1</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	UTC
	Ukraine, Kyiv	
	<sup>2</sup> National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine	
	<sup>3</sup> State Institution Institute of Marine Biology of the NAS of Ukraine, Odesa, Ukraine	
	OPTIMIZED PROTOCOL FOR DNA EXTRACTION FROM LOW-ABUNDANCE	
	ANTARCTIC BACTERIOPLANKTON SAMPLES FOR INCREASED YIELD	
11	E.A. Gribanova, V.E. Miamin	11.30-11.45
	Belarusian State University, Minsk, Belarus	UTC
	PHYSIOLOGICAL AND BIOCHEMICAL CHARACTERISTICS OF YEAST ISOLATED	0.10
	FROM DIFFERENT ECOSYSTEMS OF EASTERN ANTARCTIDA	
12	V. Holovan, V. Zoloiedova, O. Andriichuk	11.45-12.00
12	Taras Shevchenko National University of Kyiv, Ukraine	UTC
	PRESERVATION OF INFECTIVITY OF BACTERIOPHAGELYSATES ISOLATED FROM	OIC
	SOIL BIOTOPES OF THE ANTARCTIC REGION DEPENDING ON STORAGE TIME AND	
	TEMPERATURE	
12		12.00.12.15
13	Yu. G. Hihinyak <sup>1</sup> , M.P. Andreev <sup>2</sup> , E.R. Grischenko <sup>3</sup> , P. Convey <sup>4</sup> , O.L. Kandelinskaya <sup>3</sup>	12.00-12.15
	<sup>1</sup> Scientific and Practical Center for Bioresources of National Academy of Sciences of Belarus,	UTC
	Minsk, Belarus	
	<sup>2</sup> Komarov Botanical Institute of the Russian Academy of Sciences, St. Petersburg, Russia	
	<sup>3</sup> V.F. Kuprevich Institute of Experimental Botany of National Academy of Sciences of Belarus,	
	Minsk, Belarus	
	<sup>4</sup> British Antarctic Survey, NERC, Cambridge, United Kingdom	

19	O.V. Savenko State Institution National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv, Ukraine	13.30-14.00
	Zhytomyr Ivan Franko State University, Zhytomyr, Ukraine AGE FEATURES OF PSYCHOLOGICAL READINESS OF WINTERERS TO LIFE IN ANTARCTICA	
18	THE INFLUENCE OF EXTREME FACTORS  O. A. Miroshnychenko	13.15-13.30
	<sup>1</sup> Institute of Applied Cryology, Kharkiv, Ukraine <sup>2</sup> V.N. Karazin Kharkiv National University, Kharkiv, Ukraine SHORT-TERM COLD LOADS AS AN ELEMENT OF REHABILITATION ACTIONS AFTER	UTC
17	SOCIO-SPATIAL ISOLATION AND PSYCHOLOGICAL STATE OF UKRAINIAN ANTARCTIC EXPEDITIONS PARTICIPANTS  V.V.Vasiliev <sup>1</sup> , O.V.Nahlov <sup>2</sup>	13.00-13.15
	State Institution National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv	UTC
16	BIOLOGICAL CHARACTERISTICS GRAVIMORPHOSES THAT ASSIST OF MOSS SPECIES TOLERANCE IN ANTARCTICA CONDITIONS  L. M. Bakhmutova	12.45-13.00
15	O. Lobachevska <sup>1</sup> , N. Kyyak <sup>1</sup> , Ya. Khorkavtsiv <sup>1</sup> , E. Kordyum <sup>2</sup> Institute of Ecology of the Carpathians of the National Academy of Sciences of Ukraine, Lviv  M.G. Kholodny Institute of Botany of the National Academy of Sciences of Ukraine, Kyiv	12.30-12.45 UTC
	Ukraine PHOTOPROTECTOR FUNCTIONS OF UV-ABSORBING PHENOLIC COMPOUNDS OF BRYOPHYTES FROM ANTARCTICA	
	N.Y. Kyyak, O.B. Lobachevska, Y.D. Khorkavtsiv Institute of Ecology of the Carpathian of the National Academy of Sciences of Ukraine, Lviv,	12.15-12.30 UTC

May 13, 2021 Thursday 07.00 – 13.00 UTC (Kyiv UTC + 3)

## **GEOSCIENCES SESSION**

Chairperson: Sergiy Kadurin

1	O. Mytrokhyn <sup>1</sup> , V. Bakhmutov <sup>2,3</sup>	07.00-07.20
	<sup>1</sup> Taras Shevchenko National Universityof Kyiv, Ukraine	UTC
	<sup>2</sup> Institute of Geophysics National Academy of Sciences of Ukraine	
	<sup>3</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv, Ukraine	
	GEOLOGICAL SURVEY ON THE UKRAINIAN ANTARCTIC STATION AREA (THE	
	HISTORY, CURRENT STATE AND THE FUTURE)	
2	A. Chernov <sup>1</sup> , D. Pishniak <sup>1</sup> , Y. Otruba <sup>1</sup> , J. Karuss <sup>2</sup> , K. Lamsters <sup>2</sup> , M. Krievans <sup>2</sup> , V. Trokhymets <sup>3</sup>	07.20-07.40
	<sup>1</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	UTC
	Ukraine, Kyiv, Ukraine	
	<sup>2</sup> University of Latvia, Faculty of Geography and Earth Sciences, Riga, Latvia	
	<sup>3</sup> Taras Shevchenko National University of Kyiv, Educational and Scientific Center	
	«Institute of Biology and Medicine», Kyiv, Ukraine	
	APPLICATION OF GEOPHYSICAL AND BIOLOGICAL APPROACHES FOR	
	INVESTIGATIONS OF ICE-CAPS ON THE ARGENTINE ISLANDS (WEST ANTARCTICA)	
	(TIME PERIOD:2017-2020)	
3	V.Yu. Maksymchuk, I.O.Chobotok, Ye.F.Nakalov, R.S.Kuderavets, N.B.Pyrizhok	07.40-08.00
	Carpathian Branch of Subbotin Institute of Geophysics, National Academy of Sciences of	UTC
	Ukraine, Lviv, Ukraine	
	THE RESULTS OF LONG-TERM TECTONOMAGNETIC RESEARCH ON ANTARCTIC	
	GEOPHYSICAL POLIGON	
4	T.Klymkovych	08.00-08.20
	Lviv Polytechnic National University, Lviv, Ukraine	UTC
	VARIATIONS OF INDUCTION VECTORS AT THE AIA MAGNETIC OBSERVATORY	
	(AKADEMIK VERNADSKY STATION)	
5	O.I. Liashchuk <sup>1</sup> , V.K. Zhukovsky <sup>2</sup> , Ye.V. Kariagin <sup>1</sup> , Yu.A. Andrushchenko <sup>1</sup> , Yu.S. Otruba <sup>3</sup>	08.20-08.40
	<sup>1</sup> Main Center of Special Monitoring, Gorodok. Ukraine	UTC
	<sup>2</sup> K.D. Ushynsky South Ukrainian National Pedagogical University, Odesa, Ukraine	
	<sup>3</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv, Ukraine	
	SEISMO-ACOUSTIC MONITORING OF THE CRYOSPHERE IN THE VERNADSKY	
	STATION REGION	
6	O.I. Liashchuk <sup>1</sup> , Ye.V. Kariagin <sup>1</sup> , Yu.A. Andrushchenko <sup>1</sup> , V.K. Zhukovskyi <sup>2</sup> , Yu.S. Otruba <sup>3</sup> , S.V.	08.40-09.00
	Dovbysh <sup>1</sup>	UTC
	<sup>1</sup> Main Center of Special Monitoring, National Space Facilities Control and Test Center, State	
	Space Agency of Ukraine, Gorodok. Ukraine	
	<sup>2</sup> K.D. Ushynsky South Ukrainian National Pedagogical University, Odesa, Ukraine	

	<sup>3</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv, Ukraine	
	INFRASOUND ARRAY OBSERVATION IN THE ANTARCTIC PENINSULA REGION, FIRST RESULTS	
7	G.V. Melnyk <sup>1</sup> , V.G. Bakhmutov <sup>1,2</sup> , N.A. Kilifarska <sup>3</sup> , O.Ja. Shenderovska <sup>1</sup> <sup>1</sup> S.I. Subbotin Institute of Geophysics, National Academy of Sciences of Ukraine, Kyiv, Ukraine <sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	09.00-09.20 UTC
	Ukraine, Kyiv, Ukraine <sup>3</sup> National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences, Sofia, Bulgaria	
	CHANGES IN THE GEOMAGNETIC FIELD AND SURFACE AIR TEMPERATURE IN ANTARCTICA	
8	G.V. Artemenko <sup>1</sup> , V.G. Bakhmutov <sup>2</sup> <sup>1</sup> M.P. Semenenko Institute of Geochemistry, Mineralogy and Ore Formation of the National Academy of Sciences of Ukraine, Kiev, Ukraine <sup>2</sup> S.I. Subbotin Institute of Geophysics, National Academy of Sciences of Ukraine, Kyiv, Ukraine	09.20-09.40 UTC
	SIGNS OF ORE MINERALIZATION IN THE AREA OF THE ARGENTINE ISLANDS	
9	V. Bakhmutov <sup>1,2</sup> , O. Mytrokhyn <sup>3</sup> <sup>1</sup> Institute of Geophysics National Academy of Sciences of Ukraine, Kyiv, Ukraine <sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of Ukraine; <sup>3</sup> Taras Shevchenko National University of Kyiv;  MAGNETIC TEXTURE OF GABBROIDS OF THE WILHELM ARCHIPELAGO AS AN INDICATOR OF REGIONAL TECTONIC PROCESSES	09.40-10.00 UTC
10	K. Lamsters <sup>1</sup> , J. Karušs <sup>1</sup> , M. Krievāns <sup>1</sup> , J. Ješkins <sup>1</sup> , P. Džeriņš <sup>1</sup> , A. Chernov <sup>2</sup> , I. Sobota <sup>3, 4</sup> <sup>1</sup> University of Latvia, Faculty of Geography and Earth Sciences, Riga, Latvia; <sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv; <sup>3</sup> Faculty of Earth Sciences and Spatial Management, Nicolaus Copernicus University in Toruń, Toruń, Poland. <sup>4</sup> Polar Research Center, Faculty of Earth Sciences and Spatial Management, Nicolaus Copernicus University in Toruń, Toruń, Poland  GEOPHYSICAL RESEARCH OF ANTARCTIC AND ARCTIC GLACIERS AT THE UNIVERSITY OF LATVIA	10.00-10.20 UTC
11	T.P.Yegorova <sup>1</sup> , A.V., Murovskaya <sup>1</sup> , V.G.Bakhmutov <sup>1,2</sup> , A.V.Mytrokhyn <sup>3</sup> , V.V.Shpyra <sup>1</sup> <sup>1</sup> Institute of Geophysics National Academy of Sciences of Ukraine, Kyiv, Ukraine <sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv, Ukraine <sup>3</sup> Taras Shevchenko National University of Kyiv, Ukraine  EVOLUTION OF CENOZOIC MAGMATISM OF THE ANTARCTIC PENINSULA ON THE EXAMPLE OF THE BARCHANS-FORGE ISLANDS ACCORDING TO GEOLOGICAL AND GEOPHYSICAL DATA	10.20-10.40 UTC
12	K.Yu.Tkachenko Institute of Geological Sciences NAS of Ukraine, Kyiv, Ukraine PROSPECTS OF STUDY OF ELECTRIC PHENOMENA IN SNOW-AIR INTERACTIONS	10.40-11.00 UTC
13	Kh.I. Marusazh, V.M. Hlotov Institute of Geodesy, Lviv Polytechnic National University, Lviv, Ukraine THE COMPLEX STUDY FOR DETERMINATION OF THE VOLUME CHANGES OF GLACIERS ON GALINDEZ AND WINTER ISLANDS	11.00-11.20 UTC
14	I. Savchyn, K. Tretyak Lviv Polytechnic National University, Institute of Geodesy, Lviv, Ukraine CRYSTAL STRAIN ANALYSIS IN THE PENOLA STRAIT - LEMAIRE CHANNEL FAULT AREA	11.20-11.40 UTC
	POSTERS:	11.40-13.00 UTC
1	V.G.Pysarenko  V.M. Glushkov Institute of Cybernetics, National Academy of Sciences of Ukraine, Kyiv, Ukraine THE CONCEPT OF ANTARCTIC GLACIER MELTING PROCESSES MONITORING ORGANIZATION	11.40-12.00 UTC

,	V.D. Soloviev <sup>1</sup> , N.A. Yakymchuk <sup>2</sup> , I.N. Korchagin <sup>1</sup>	12.00-12.15
	<sup>1</sup> Institute of Geophysics of Ukraine National Academy of Science, Kyiv, Ukraine	UTC
	<sup>2</sup> Institute of Applied Problems of Ecology, Geophysics and Geochemistry, Kyiv, Ukraine IS	
	GIANT STRUCTURE AT WILKES LAND (EAST ANTARCTICA) METEORITE CRATER	
	OR VOLCANO?	
	V.D. Soloviev <sup>1</sup> , V.G. Bakhmutov <sup>1</sup> , N.A. Yakymchuk <sup>2</sup> , I.N. Korchagin <sup>1</sup>	12.15-12.30
	Institute of Geophysics of Ukraine National Academy of Sciences, Kyiv, Ukraine,	UTC
	<sup>2</sup> Institute of Applied Problems of Ecology, Geophysics and Geochemistry, Kyiv, Ukraine	
	THE FIRST ACTIVE METHANE SEEPS IN ANTARCTICA: NEW EXPERIMENTAL DATA	
	S.V. Kadurin, K.P. Andreeva	12.30-12.45
	Odessa I.I. Mechnikov National University, Odesa PETROGRAPHIC AND MINERALOGICAL STUDY OF MAGMATIC ROCKS IN	UTC
	UKRAINIAN ANTARCTIC AKADEMIK VERNADSKY STATION AREA	
	M.I. Orlyuk, A.O. Romenets	12.45-13.00
	S.I. Subbotin Institute of Geophysics of the National Academy of Sciences of Ukraine, Kyiv,	UTC
	Ukraine	
	SPATIAL-TIME STRUCTURE OF GEOMAGNETIC FIELD FOR THE TERRITORIES OF	
	UKRAINE, OF YAMAL (RUSSIA) AND AROUND THE UKRAINIAN ANTARCTIC	
	AKADEMIK VERNADSKY STATION: ECOLOGICAL ASPECT	

May 12, 2021 Wednesday 07.00 – 14.20 UTC (Kyiv UTC + 3)

## PHYSICAL SCIENCES

# Chairpersons: Oleksandr Koloskov, Andriy Zalizovski

1	Yu.G. Rapoport <sup>1,2</sup> , V.M. Reshetnyk <sup>1</sup> , M. Hayakawa <sup>3</sup> , V.V. Grimalsky <sup>4</sup> , O.V. Agapitov <sup>5</sup> , A.V.	07.00-07.20
1	Grytsai <sup>1</sup> , A.I. Liashchuk <sup>2</sup> , V.M. Ivchenko <sup>1</sup> , A.K. Fedorenko <sup>6,1</sup> , S.S. Petrishchevskii <sup>1</sup> , V.N. Fedun <sup>7</sup>	UTC
	<sup>1</sup> Taras Shevchenko National University of Kyiv, Ukraine	OTC
	<sup>2</sup> National Center for Control and Testing of Space Facilities of the State Space Agency of	
	Ukraine (NCCSSAU), Kyiv, Ukraine	
	<sup>3</sup> Hayakawa Institute of Seismo Electromagnetics, Co. Ltd., Japan	
	<sup>4</sup> CIICAp, Autonomous University of State Morelos (UAEM), Cuernavaca, Mor., Mexico	
	<sup>5</sup> University of California, Berkeley, USA	
	<sup>6</sup> Space Research Institute of National Academy of Sciences of Ukraine and State Space Agency of	
	Ukraine, Kyiv, Ukraine	
	<sup>7</sup> The University of Sheffield, UK	
	MODELING ULF AND VLF ACTIVITY IN THE NEAR-EARTH SPACE ENVIRONMENT:	
	BOUNDARY CONDITIONS AND PROPAGATION EFFECTS	
2	O.V. Bogomaz <sup>1</sup> , M.O. Shulha <sup>1,2</sup> , D.V. Kotov <sup>1,2</sup> , T.G. Zhivolup <sup>1</sup> , A.V. Koloskov <sup>3,4</sup> ,	07.20-07-40
2	A.V. Zalizovski <sup>3,4,5</sup> , V.M. Lisachenko <sup>3</sup>	UTC
	<sup>1</sup> Institute of Ionosphere, NAS and MES of Ukraine, Kharkiv, Ukraine	ore
	<sup>2</sup> National Technical University "Kharkiv Polytechnic Institute", Kharkiv, Ukraine	
	<sup>3</sup> Institute of Radio Astronomy of NASU, Kharkiv, Ukraine	
	<sup>4</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv, Ukraine	
	<sup>5</sup> Space Research Centre of Polish Academy of Sciences, Warsaw, Poland	
	TESTING THE ARTIFICIAL NEURAL NETWORK FOR SCALING IONOGRAMS	
	OBTAINED AT THE UKRAINIAN ANTARCTIC AKADEMIK VERNADSKY STATION	
3	A.V. Grytsai <sup>1</sup> , O.M. Evtushevsky <sup>1</sup> , G.P. Milinevsky <sup>1,2</sup> and A. Klekociuk <sup>3,4</sup>	07.40-08.00
	<sup>1</sup> Taras Shevchenko National University of Kyiv, Kyiv, Ukraine	UTC
	<sup>2</sup> National Antarctic Scientific Center, Kyiv, Ukraine	
	<sup>3</sup> Antarctic Climate Program, Australian Antarctic Division, Kingston, Australia	
	<sup>4</sup> Department of Physics, University of Adelaide, Adelaide, Australia	
	PLANETARY WAVE INFLUENCE ON THE OZONE HOLE IN 2010–2020	
4	A.K. Fedorenko, O.K. Cheremnykh, E.I. Kryuchkov, Yu.O. Klymenko	08.00-08.20
	Space Research Institute of National Academy of Science of Ukraine and State Space Agency of	UTC
	Ukraine, Kyiv, Ukraine	
	WIND CONTROL OF DIRECTIONS PROPAGATION AND AMPLITUDES OF WAVE	
	PERTURBATIONS IN THE UPPER ATMOSPHERE OVER ANTARCTICA	
5	O. Ivaniha	08.20-08.40
	Taras Shevchenko National University of Kyiv, Kyiv, Ukraine	UTC
	VIEW ON TROPOPAUSE BEHAVIOR OVER ANTARCTICA	
6	Andriy Zalizovski <sup>1,2,3</sup> , Yuri Yampolski <sup>1</sup> , Oleksandr Koloskov <sup>1,2</sup> , Sergei Kashcheyev <sup>1</sup> , Bogdan	08.40-09.00
	Gavrylyuk <sup>1,2</sup> , Olesia Charkina <sup>1</sup>	UTC

	Institute of Radio Astronomy of NAS of Ukraine, Kharkiv, Ukraine	
	<sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv, Ukraine	
	<sup>3</sup> Space Research Centre of Polish Academy of Sciences, Poland	
	HF RADIO SOUNDING OF THE IONOSPHERE ON LONG-DISTANCE RADIO PATHS	
	WITH A RECEIVING SITE AT AKADEMIK VERNADSKY STATION: THE RESULTS OF	
	THE FIRST 11 YEARS OF OBSERVATIONS	
7	Oleksandr Koloskov <sup>1,2</sup> , Andriy Zalizovski <sup>1,2,3</sup> , Yuri Yampolski <sup>1</sup> , Gennady Milikh <sup>4</sup> , Evgeny	09.00-09.20
	Mishin <sup>5</sup> , Artem Reznychenko <sup>1</sup> , Michael Rietveld <sup>6</sup> , Erik Varberg <sup>6</sup> , Juha Vierinen <sup>6</sup>	UTC
	<sup>1</sup> Institute of Radio Astronomy of NAS of Ukraine, Kharkiv, Ukraine	
	<sup>2</sup> State Institution National Antarctic Scientific Center, MES of Ukraine, Kyiv, Ukraine	
	<sup>3</sup> Space Research Centre of Polish Academy of Sciences, Warsaw, Poland	
	<sup>4</sup> Department of Astronomy, University of Maryland, College Park, MD, USA	
	<sup>5</sup> Space Vehicles Directorate, Air Force Research Laboratory, Albuquerque, NM, USA <sup>6</sup> UiT The Arctic University of Norway, Tromsø, Norway	
	HF RESPONSE IN ANTARCTICA DURING EISCAT-UKRAINE HEATING CAMPAIGN	
	(JUNE, 2020)	
8	Andriy Zalizovski <sup>1,2,3</sup> , Iwona Stanislawska <sup>2</sup> , Lukasz Tomasik <sup>2</sup>	09.20-09.40
	Institute of Radio Astronomy of NAS of Ukraine, Kharkiv, Ukraine	UTC
	<sup>2</sup> Space Research Centre of Polish Academy of Sciences, Poland	OTC
	<sup>3</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv, Ukraine	
	ADVANCED TECHNIQUE FOR ESTIMATING THE MONTHLY MEDIAN IONOSPHERIC	
	PARAMETERS AT THE AURORAL REGIONS	
9	M.O. Shulha <sup>1,2</sup> , D. V. Kotov <sup>1</sup> , O.V. Bogomaz <sup>1</sup> , T.G. Zhivolup <sup>1</sup> , O.V. Koloskov <sup>3,4</sup> , A.V.	09.40-10.00
	Zalizovski <sup>3,4,5</sup> V.M. Lisachenko <sup>3</sup> , A.I. Reznychenko <sup>3</sup>	UTC
	<sup>1</sup> Institute of Ionosphere, NAS and MES of Ukraine, Kharkiv, Ukraine	
	<sup>2</sup> National Technical University "Kharkiv Polytechnic Institute", Kharkiv, Ukraine	
	<sup>3</sup> Institute of Radio Astronomy of NASU, Kharkiv, Ukraine	
	<sup>4</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv, Ukraine	
	<sup>5</sup> Space Research Centre of Polish Academy of Sciences, Warsaw, Poland SEASONAL EFFECTS IN VARIATIONS OF ELECTRON DENSITY OVER THE	
	UKRAINIAN ANTARCTIC STATION: RESULTS OF OBSERVATIONS AND MODELLING	
10	M.O. Shulha <sup>1,2</sup> , D.V. Kotov <sup>1</sup> , O.V. Bogomaz <sup>1</sup> , T.G. Zhivolup <sup>1</sup> , O.V. Koloskov <sup>3,4</sup> , A.V.	10.00-10.20
10	Zalizovski <sup>3,4,5</sup> V.M. Lisachenko <sup>3</sup> , A.I. Reznychenko <sup>3</sup>	UTC
	<sup>1</sup> Institute of Ionosphere, NAS and MES of Ukraine, Kharkiv, Ukraine	OIC
	<sup>2</sup> National Technical University "Kharkiv Polytechnic Institute", Kharkiv, Ukraine	
	<sup>3</sup> Institute of Radio Astronomy of NASU, Kharkiv, Ukraine	
	<sup>4</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv, Ukraine	
	<sup>5</sup> Space Research Centre of Polish Academy of Sciences, Warsaw, Poland	
	RESULTS OF IONOSPHERE-PLASMASPHERE SYSTEM INVESTIGATION IN THE	
	AMERICAN AND EUROPEAN LONGITUDINAL SECTORS FOR 2020	
11	O.V. Koloskov <sup>1,2</sup> , Y.M Yampolski <sup>1</sup> , O.V. Budanov <sup>1</sup> , Chis Hall <sup>3</sup>	10.20-10.40
	<sup>1</sup> Institute of Radio Astronomy of National Academy of Sciences of Ukraine, Kharkiv, Ukraine	UTC
	<sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
	Ukraine, Kyiv, Ukraine	
	<sup>3</sup> UiT The Arctic University of Norway, Tromsø, Norway TWO POSITION ANTARCTIC-ARCTIC "COUNTER" OF INTENSE LIGHTNING	
	DISCHARGES	
12	O.V. Koloskov <sup>1,2</sup> , Y.M Yampolski <sup>1</sup> , O.V. Budanov <sup>1</sup>	10.40-11.00
12	Institute of Radio Astronomy of National Academy of Sciences of Ukraine, Kharkiv, Ukraine	UTC
	<sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	OIC
	Ukraine, Kyiv, Ukraine	
	MONITORING OF THE POWER LINE EMISSION FROM NORTH AMERICA AT THE	
	UKRAINIAN ANTARCTIC AKADEMIK VERNADSKY STATION	
		11.00-11.20
13	Andriy Zalizovski <sup>1,2,3</sup> , Volodymyr Lisachenko <sup>1</sup> , Bogdan Gavrylyuk <sup>1,2</sup>	11.00-11.20
13	Andriy Zalizovski <sup>1,2,3</sup> , Volodymyr Lisachenko <sup>1</sup> , Bogdan Gavrylyuk <sup>1,2</sup> <sup>1</sup> Institute of Radio Astronomy of NAS of Ukraine, Kharkiv, Ukraine	UTC
13	Andriy Zalizovski <sup>1,2,3</sup> , Volodymyr Lisachenko <sup>1</sup> , Bogdan Gavrylyuk <sup>1,2</sup> <sup>1</sup> Institute of Radio Astronomy of NAS of Ukraine, Kharkiv, Ukraine <sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	
13	<sup>1</sup> Institute of Radio Astronomy of NAS of Ukraine, Kharkiv, Ukraine	

	THE ROLE OF SPORADIC E LAYERS IN LONG DISTANCE HF PROPAGATION	
	TOWARD THE ANTARCTIC PENINSULA	
14	A. A. Shvets <sup>1</sup> , O.V. Budanov <sup>2</sup> , O.V. Koloskov <sup>2,3</sup> , A.P. Nickolaenko <sup>1</sup> , A.V. Shvets <sup>1</sup> <sup>1</sup> O.Ya. Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine <sup>2</sup> Institute of Radio Astronomy of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine <sup>3</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of	11.20-11.40 UTC
	Ukraine, Kyiv, Ukraine DEVIATIONS OF THE AZIMUTH OF ELF BURSTS ASSOCIATED WITH THE "DAY-NIGHT" NONUNIFORMITY	
15	A.V. Shvets, A. A. Shvets  O.Ya. Usikov Institute of Radio Physics and Electronics of the National Academy of Sciences of Ukraine, Kharkiv, Ukraine  TOMOGRAPHY OF THE WORLD THUNDERSTORM ACTIVITY: MODELING FOR TWO SUBPOLAR AND ONE MIDLATITUDE SCHUMANN RESONANCE OBSERVATORIES	11.40-12.00 UTC
16	G.P. Milinevsky <sup>1,2</sup> , A.V. Grytsai <sup>1</sup> , O.M. Evtushevsky <sup>1</sup> , A. Klekociuk <sup>3,4</sup> , O. Ivaniha <sup>1</sup> , Y. Wang <sup>5</sup> <sup>1</sup> Taras Shevchenko National University of Kyiv, Kyiv, Ukraine <sup>2</sup> National Antarctic Scientific Center, Kyiv, Ukraine <sup>3</sup> Antarctic Climate Program, Australian Antarctic Division, Kingston, Australia <sup>4</sup> Department of Physics, University of Adelaide, Adelaide, Australia <sup>5</sup> College of Physics, International Center of Future Science, Jilin University, Changchun, China POLAR STRATOSPHERIC WARMINGS AND WEATHER PATTERN IN UKRAINE	12.00-12.20 UTC
17	D. Pishniak <sup>1</sup> , B. Beznoshchenko <sup>2</sup> , O. Pavlenko <sup>3</sup> <sup>1</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv, Ukraine <sup>2</sup> The Hebrew University of Jerusalem, Rehovot, Israel <sup>3</sup> Central Geophysical Observatory named after Boris Sreznevsky, Kyiv, Ukraine  MESOSCALE ATMOSPHERIC PROCESSES OVER THE AKADEMIK VERNADSKY STATION REGION BASED ON SIMULATION AND IN-SITU RESULTS	12.20-12.40 UTC
18	Chyhareva A. <sup>1,2</sup> , Krakovska S. <sup>1,2</sup> , Gorodetskaya I. <sup>3</sup> , Pishniak D. <sup>2</sup> <sup>1</sup> National Antarctic Scientific Center of Ukraine, Ministry of Education and Science of Ukraine, Kyiv, Ukraine <sup>2</sup> Ukrainian Hydrometeorological Institute, Kyiv, Ukraine <sup>3</sup> Centre for Environmental and Marine Studies, Department of Physics, University of Aveiro, Portugal  PRELIMINARY RESULTS OF PolarWRF APPLICATION FOR CLOUD AND PRECIPITATION STUDY AT UKRAINIAN ANTARCTIC AKADEMIK VERNADSKY STATION	12.40-13.00 UTC
19	V.F.Martazinova, V.E.Tymofeyev  Ukrainian Hydrometeorological Institute, the State Emergency Service of Ukraine, Kyiv, Ukraine  TOTAL OZONE ANOMALY OVER ANTARCTICA AND PECULIARITIES OF THE  ATMOSPHERIC CIRCULATION	13.00-13.20 UTC
20	M. Savenets <sup>1</sup> , L. Pysarenko <sup>1</sup> , D. Pishniak <sup>2</sup> <sup>1</sup> Ukrainian Hydrometeorological Institute, State Emergency Service of Ukraine and National Academy of Sciences of Ukraine, Kyiv, Ukraine <sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv, Ukraine  THE RELATIONSHIP BETWEEN LAND SURFACE TEMPERATURE AND METEOROLOGICAL CONDITIONS ON THE ARGENTINE ISLANDS	13.20-13.40 UTC
21	V.E.Tymofeyev, O.V. Mazepa, O.G. Tatarchuk  Ukrainian Hydrometeorological Institute, the State Emergency Service of Ukraine, Kyiv, Ukraine  CURRENT STATE OF GLACIOCLIMATE AT THE NORTH ANTARCTIC PENINSULA	13.40-14.00 UTC
22	S. V. Klok <sup>1</sup> , A. O. Kornus <sup>2,3</sup> , O. H. Kornus <sup>2</sup> <sup>1</sup> Ukrainian Hydrometeorological Institute of State Service of Emergencies of Ukraine and National Academy of Sciences of Ukraine, 37, Prospekt Nauky, Kyiv, 03028, sklok_8@ukr.net <sup>2</sup> Sumy State University, Rymsky-Korsakov Street, 2, Sumy, 40007, a.kornus@ecolog.sumdu.edu.ua <sup>3</sup> Sumy State Pedagogical University named after A. S. Makarenko, Romenska Street, 87, Sumy, Ukraine, 40002, olesyakornus@gmail.com  THE COMPONENTS OF SEASONAL VARIABILITY OF THE SNOW DEPTH IN THE AREA OF THE UKRAINIAN ANTARCTIC AKADEMIK VERNADSKY STATION	14.00-14.20 UTC

May 13, 2021 Thursday 07.00 – 08.45 UTC (Kyiv UTC + 3)

### PHYSICAL SCIENCES

# Chairpersons: Oleksandr Koloskov, Andriy Zalizovski

1	V. Komorin, V. Bolshakov, Y. Dikhanov, E. Melnik  Research Institution "Ukrainian scientific center of Ecology of Sea", Odesa, Ukraine  MAIN RESULTS OF OCEANOGRAPHIC RESEARCH IN THE SOUTH ATLANTIC AND  THE ATLANTIC SECTOR OF THE SOUTHERN OCEAN ACCORDING TO THE SEASON  DATA 2018-2020	07.00-07.20 UTC
2	P. Zabroda <sup>1</sup> , L. Pshenichnov <sup>1</sup> , D. Marichev <sup>2</sup> <sup>1</sup> Institute of Fisheries and Marine Ecology, Berdiansk, Ukraine <sup>2</sup> LLC Fishing Company Neptuno, Odessa, 67500 Ukraine  THE RESULTS OF OBSERVATIONS USING AN UNDERWATER VIDEO RECORDING SYSTEM IN THE WEDDELL SEA IN 2020	07.20-07.40 UTC
3	L. Pshenichnov  Institute of Fisheries and Marine Ecology, Berdiansk, Ukraine HISTORY AND MODERNITY OF WORK OF FISHING VESSELS OF UKRAINE IN THE WATERS OF THE SOUTHERN OCEAN	07.40-08.00
	POSTERS:	08.00-08.45 UTC
1	Yu.S. Andrienko <sup>1</sup> , G.P. Milinevsky <sup>1,2</sup> , V.O. Danylevsky <sup>1</sup> <sup>1</sup> Taras Shevchenko National University of Kyiv, Ukraine <sup>2</sup> State institution National Antarctic Scientific Center Ministry of Education and Science of Ukraine, Kyiv, Ukraine  VERTICAL DISTRIBUTION OF OZONE IN THE ATMOSPHERE OVER KYIV AND OVER THE UKRAINIAN ANTARCTIC AKADEMIK VERNADSKY STATION ACCORDING TO UMKEHR DATA	08.00-08.15 UTC
2	Yu.V. Gorishnya  O.Ya. Usikov Institute for Radiophysics and Electronics of the National Academy of Sciences of Ukraine; Kharkov, Ukraine  SPECTRA OF TWEEK ATMOSPHERICS AND THE IMPACT OF THEIR PATHS'  ORIENTATION REGARDING THE GEOMAGNETIC FIELD THROUGH OBSERVATIONS AT UKRAINIAN ANTARCTIC AKADEMIK VERNADSKY STATION	08.15-08.30 UTC
3	O.M. Evtushevsky <sup>1</sup> , G.P. Milinevsky <sup>1,2</sup> and A.V. Grytsai <sup>1</sup> <sup>1</sup> Taras Shevchenko National University of Kyiv, Kyiv, Ukraine <sup>2</sup> State Institution National Antarctic Scientific Center Ministry of Education and Science of Ukraine, Kyiv, Ukraine  ANNUAL CYCLE IN THE NORTHERN HEMISPHERE POLAR-TO-MIDLATITUDE  OZONE AND ITS RELATION TO STATIONARY WAVE STRUCTURE	08.30-08.45 UTC

May 12, 2021 Wednesday 07.00 – 09.00 UTC (Kyiv UTC + 3)

## NEW TECHNOLOGIES AND EQUIPMENT

Chairpersons: Viacheslav Marchenko

1	V.Bazhenov, O. Lukianchenko, M. Vabishchevych, O. Paliy  Kyiv National University of Construction and Architecture (KNUCA), Kyiv, Ukraine  PRESSING ISSUES OF TROUBLE-FREE OPERATION AND MODERNIZATION OF THE  INFRASTRUCTURE OF THE UKRAINIAN ANTARCTIC AKADEMIK VERNADSKY  STATION	07.00-07.20 UTC
2	S. Tsybulnyk  Igor Sikorsky Kyiv Polytechnic Institute, Kyiv, Ukraine CURRENT STATE AND PERSPECTIVES ON FUEL TANK PROTECTION	07.20-07-40 UTC
3	Viktor B. Raspopov, Vadim M. Semyanovsky Research and Training Center for Applied Informatics of the National Academy of Sciences of Ukraine, Kyiv, Ukraine YOUTH ECOLOGICAL PROJECT "SOLAR-HYDROGEN ENERGY FOR UKRAINIAN ANTARCTIC AKADEMIK VERNADSKY STATION"	07.40-08.00 UTC
	POSTERS:	08.00-09.20 UTC
1	A. Marusenkov <sup>1</sup> , S. Leonov <sup>1</sup> , V. Korepanov <sup>1</sup> , Yu. Otruba <sup>2</sup> , M. Leonov <sup>2</sup> <sup>1</sup> Lviv Center of Institute for Space Research of NAN and SSA of Ukraine, Lviv, Ukraine <sup>2</sup> State Institution National Antarctic Scientific Center, Ministry of Education and Science of Ukraine, Kyiv, Ukraine  UPGRADE OF THE GEOMAGNETIC OBSERVATORY "ARGENTINE ISLANDS": NEW TECHNOLOGIES AND EQUIPMENT	08.00-08.20 UTC
2	Yu. M. Posypaiko  E.O. Paton Institute of Electric Welding, Kyiv, Ukraine  MONITORING OF TECHNICAL CONDITION OF TANKS AT UKRAINIAN ANTARTIC  AKADEMIK VERNADSKY STATION	08.20-08.40 UTC
3	G. Lizunov, L. Galkovska, O. Parnowski, O. Protas, O. Piankova, V. Reshetnyk  Space Research Institute NAS of Ukraine and SSA of Ukraine, Kyiv, Ukraine  ON THE ANTARCTIC RESEARCH DATA INFORMATION SYSTEM CONCEPT	08.40-09.00 UTC