

**XXI International Conference on Inorganic Chemistry
Ukraine 2024 (XXI ICICU)**



SCIENTIFIC PROGRAM

of XXI International Conference on Inorganic
Chemistry Ukraine (XXI ICICU)

(Uzhhorod 2024, June 3-6)

SCIENTIFIC PROGRAM XXI ICICU 2024

Monday June 3

9 ⁰⁰	Registration of participants <i>Narodna Square 3, UzhNU rector's House (площа Народна 3, ректорат УжНУ)</i>		
10 ⁰⁰	Opening of the XXI International Conference on Inorganic Chemistry Ukraine		
	Chairperson: Igor Barchiy, Roman Gladyshevskii		
10 ³⁰	Anatolii Belous , Oleg V'yunov, Serhii Solopan, Olexandr Fedorchuk, Leonid Kovalenko. SYNTHESIS OF WEAKLY AGGLOMERATED FERROMAGNETIC NANOPARTICLES FOR MAGNETICALLY CONTROLLED ELEMENTS <i>V. I. Vernadsky Institute of General & Inorganic Chemistry of the NAS of Ukraine</i>	I-1	FtoF
11 ⁰⁰	Roman Gladyshevskii . CRYSTAL CHEMISTRY AS A LINK BETWEEN STRUCTURE AND PROPERTIES <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Ukraine</i>	I-2	FtoF
11 ³⁰	Igor Barchiy ¹ , Victoria Sabov ¹ , Artem Pogodin ¹ , Marian Sabov ¹ , Michal Piasecki ² , Oleg Khyzhun ³ , Volodymyr Pavlyuk ^{2,4} , Anatolii Fedorchuk ⁵ . Ag(Tl)–Sb(In)–P–Se SYSTEMS: INTERMEDIATE COMPOUNDS AND THEIR PROPERTIES. ¹ <i>Uzhhorod National University, Ukraine</i> ² <i>J. Dlugosz University Czestochowa, Poland</i> ³ <i>Frantsevych Institute for Problems of Materials Science, NAS of Ukraine, Ukraine</i> ⁴ <i>Ivan Franko Lviv National University, Ukraine</i> ⁵ <i>Lviv National University of Veterinary Medicine and Biotechnologies, Ukraine</i>	I-3	FtoF
12 ⁰⁰	Olena Martsynko ¹ , Inna Seifullina ¹ , Olena Finik ² , Kyrylo Tsymbaliuk ^{1,2} . STRUCTURE FEATURES AND PHARMACOLOGICAL PROPERTIES OF GERMANIUM(IV) COMPLEXES WITH 1-HYDROXYETHANE-1,1-DIPHOSPHONIC ACID ¹ <i>Odesa I.I. Mechnikov National University, Ukraine</i> ² <i>LLC "INSPECTORAT UKRAINE", Ukraine</i>	I-4	FtoF
12 ³⁰	<i>Conference photo</i>		
12 ³⁵	<i>Excursion to the archaeological museum of UzhNU</i>		
13 ⁰⁰	Lunch break		
	<i>Fedentsia St. 53, Faculty of Chemistry, UzhNU, aud.201</i> <i>Вул. Фединця 53, хімічний факультет УжНУ, ауд.201</i>		
	Chairperson: Oleksandr Kokhan		
14 ⁰⁰	Pavlo Torchyniuk , Oleg V'yunov, Anatolii Belous. SYNTHESIS AND PROPERTIES OF ORGANIC-INORGANIC PEROVSKITES WITH ORGANIC CATIONS OF DIFFERENT SPATIAL STRUCTURES <i>V. I. Vernadsky Institute of General & Inorganic Chemistry of the NAS of Ukraine, Ukraine</i>	P-1	OL
14 ³⁰	Ivan Lisovskyi ¹ , Volodymyr Khomenko ² , Leonid Kovalenko ¹ , Serhii Solopan ¹ , Anatolii Belous ¹ . DEVELOPMENT OF COMPOSITE SOLID ELECTROLYTE BASED ON POLYVINYLIDENE FLUORIDE AND NASICON NANOPARTICLES FOR LITHIUM BATTERIES ¹ <i>V. I. Vernadsky Institute of General and Inorganic Chemistry NAS Ukraine, Kyiv, Ukraine</i> ² <i>Kyiv National University of Technologies and Design, Kyiv, Ukraine</i>	P-2	OL
15 ⁰⁰	O. Dryuchko ¹ , V. Cherginets ² , V. Soloviev ¹ , N. Bunyakina ¹ , Yu. Golik ¹ , O. Illiash ¹ , A. Burda ¹ . FORMATION OF POLYFUNCTIONAL PEROXITE-LIKE LAYERED OXIDE MATERIALS USING COORDINATED REE NITRATE PRECURSORS AND ALKALI METALS ¹ <i>National University "Yuri Kondratyuk Poltava Polytechnic", Ukraine</i> ² <i>Institute of scintillation materials of the NAS of Ukraine, Ukraine</i>	P-3	OL
15 ³⁰	Serhii Smola ¹ , Valeriia Halushchenko ^{1,2} , Oleksandr Korovin ¹ , Dmytro Khomenko ³ , Viktoriia Dyakonenko ^{4,5} , Rostislav Lampeka ³ , Natalya Rusakova ¹ . LUMINESCENT HYBRID MATERIALS BASED ON NEW LANTHANIDE COMPLEXES WITH PYRIDINE-1,2,4,-TRIAZOLE LIGAND	P-4	OL

	¹ A.V. Bogatsky Physico-Chemical Institute of the NAS of Ukraine, Ukraine ² Faculty of Chemistry and Pharmacy, Odesa I.I. Mechnikov National University, Ukraine ³ Department of Chemistry, Kyiv National Taras Shevchenko University, Ukraine ⁴ STC "Institute for Single Crystals", NAS of Ukraine, Ukraine ⁵ V.I. Vernadsky Institute of General and Inorganic Chemistry of the NAS of Ukraine, Ukraine		
16 ⁰⁰	Excursion to the botanical garden of UzhNU		
Tuesday June 4			
	Chairpersons: Anatolii Belous, Olena Martsynko		
9 ⁰⁰	Yu. Vysochanskii , V. Liubachko, R. Yevych, K. Glukhov, V. Hryts, M. Medulych, A. Pogodin, A. Kohutysh. TUNING OF FERROIONIC PROPERTIES OF 2D CuInP ₂ S ₆ FAMILY BY CATIONIC AND ANIONIC SUBSTITUTION <i>Uzhhorod National University, Ukraine</i>	I-5	FtoF
9 ³⁰	Peter Strizhak . NOVEL INORGANIC MATERIALS FOR HETEROGENEOUS CATALYSIS <i>L.V.Pisarzhevskii Institute of Physical Chemistry, National Academy of Sciences of Ukraine</i>	I-6	OL
10 ⁰⁰	Viktor Hlukhyy . TERNARY INTERMETALLIC NICKEL TETRELIDES: STRUCTURAL PECULIARITIES AND RECORDS <i>Technical University of Munich, Germany</i>	I-7	FtoF
10 ³⁰	Alexander Golub . MODERN UKRAINIAN CHEMICAL TERMINOLOGY AND NOMENCLATURE OF INORGANIC AND COORDINATION CHEMISTRY <i>National University of Kyiv-Mohyla Academy, Ukraine</i>	I-8	OL
11 ⁰⁰	<i>Coffe break</i>		
11 ³⁰	Marian Sabov . PHASE EQUILIBRIA AND PROPERTIES OF COMPOUNDS IN THE CHALCOGENIDE SYSTEMS OF THALLIUM, TIN AND LEAD <i>Uzhhorod National University, Ukraine</i>	P-5	FtoF
12 ⁰⁰	Yuliia Shlapa ¹ , Katarina Siposova ² , Veronika Sarnatskaya ³ , Bogdan Gerashchenko ³ , Andrey Musatov ² , Anatolii Belous ¹ . BIOCOMPATIBLE CaCeO ₂ COMPOSITES: SYNTHESIS, CHARACTERISATION, BIOACTIVITY ASSESSMENT ¹ V. I. Vernadsky Institute of General & Inorganic Chemistry of the NAS of Ukraine, Kyiv, Ukraine ² Institute of Experimental Physics, Slovak Academy of Science, Kosice, Slovakia ³ R. E. Kavetsky Institute of Experimental Pathology, Oncology and Radiobiology of the NAS of Ukraine, Kyiv, Ukraine	P-6	FtoF
12 ³⁰	Grygoriy Dmytriv ¹ , Volodymyr Pavlyuk ¹ , Helmut Ehrenberg ² , Arthur Mar ³ . OPTICAL PROPERTIES OF THE SOME PHASES IN THE Li-{Cu,Ag,Zn}-{Al,Ga,In} SYSTEMS. ¹ Ivan Franko National University of Lviv, Ukraine ² Karlsruhe Institute of Technology, Institute for Applied Materials, Eggenstein-Leopoldshafen, Germany ³ University of Alberta, Edmonton, AB, Canada	P-7	FtoF
13 ⁰⁰	<i>Lunch break</i>		
	Chairperson: Marian Sabov		
14 ⁰⁰	Artem Pogodin ¹ , Mykhailo Filep ^{1,2} , Tetyana Malakhovska ¹ , Yaroslav Studenyak ¹ , Yuliya Zhukova ¹ , Iryna Shender ¹ , Vitaliy Bilanych ¹ , Oleksandr Kokhan ¹ . THE Ag _{6+x} (P _{1-x} Ge _x)S ₅ I SOLID SOLUTIONS: STRUCTURAL, ELECTRICAL, OPTICAL AND MECHANICAL PROPERTIES ¹ Uzhhorod National University, Ukraine ² Ferenc Rákóczi II Transcarpathian Hungarian Institute, Ukraine	P-8	FtoF
14 ³⁰	Natalya Rusakova , Nikolay Semenishyn, Serhii Smola. NEW NEAR-INFRARED LUMINESCENT MATERIALS BASED ON LANTHANIDE (III) COMPLEXES <i>A.V. Bogatsky Physico-Chemical Institute NAS of Ukraine, Ukraine</i>	P-9	OL
15 ⁰⁰	D. Sofronov ¹ , M. Batentschuk ² , Yu. Kazarinov ³ , K. Lamonova ^{4,5} . SYNTHESIS OF CHALCOGENIDS ZnB ₂ X ₄ (B = Ga, In; X = S, Se) SPINELS COMPOUNDS ¹ Institute for Single Crystals National Academy of Sciences of Ukraine, Ukraine	P-10	OL

	² <i>Institute of Materials for Electronics and Energy Technology (i-MEET), Department of Materials Science and Engineering, Germany</i> ³ <i>National Science Center Kharkiv Institute of Physics and Technology, Ukraine</i> ⁴ <i>O. O. Galkin Donetsk Institute for Physics and Engineering, NAS of Ukraine, Ukraine</i> ⁵ <i>Max-Born-Institute for Nonlinear Optics and Short Pulse Spectroscopy, Germany</i>		
15 ²⁰	Nikolay Semenishyn , Valeriia Linnyk, Nataliia Rusakova. MULTIEMISSION OF MULTITOPIC LANTHANIDE-CONTAINING TETRAPYRROLES <i>AV Bogatsky Physico-Chemical Institute NAS of Ukraine, Ukraine</i>	P-11	OL
15 ⁴⁰	Oleksandra Berezhytska . STRUCTURE AND PROPERTIES OF MONOMERIC AND POLYMERIC COORDINATION COMPOUNDS OF LANTHANIDES. <i>V.I.Vernadsky Institute of General and Inorganic Chemistry NASU, Kyiv, Ukraine</i>	P-12	OL
16 ⁰⁰	Yaroslav Nechesnyi , Natalia Kosylo, Andrii Hotynchan, Petro Fochuk. SYNTHESIS OF CsPbBr ₃ NANOPARTICLES FROM BULK CRYSTALS RESIDUES <i>Yuriy Fedkovych Chemivtsi National University, Ukraine</i>	P-13	OL
16 ²⁰	Volodymyr Babizhetskyy ¹ , Jean-François Halet ² . CHEMISTRY OF RARE EARTH METAL BOROSILICIDES. RECENT DEVELOPMENTS. ¹ <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Ukraine</i> ² <i>University of Rennes, Institut des Sciences Chimiques de Rennes, France</i>	P-14	OL
16 ⁴⁰	V.F. Zinchenko ¹ , G.V. Volchak ¹ , I.R. Magunov ¹ , O.V. Mozkova ² , A.V. Babenko ^{1,4} , S.V. Kuleshov ³ NANOSTRUCTURING IN SiO–GeO ₂ –B ₂ O ₃ AND SiO–ZnO SYSTEMS. ¹ <i>O.V. Bogatsky Physico-Chemical Institute, NAS of Ukraine,</i> ² <i>State Enterprise for Special Instrument Making «Arsenal», Ukraine</i> ³ <i>Vernadsky Institute of General and Inorganic Chemistry, NAS of Ukraine.</i> ⁴ <i>Odesa I.I. Mechnikov National University, Ukraine</i>	P-15	OL
17 ⁰⁰	<i>Conference discussion</i>		

Wednesday June 5

	Chairperson: Grygoriy Dmytriv, Svitlana Orysyk		
9 ⁰⁰	Ruslan Mariychuk . GREEN SYNTHESIZED PLASMONIC NANOPARTICLES: PREPARATION, PROPERTIES AND APPLICATION <i>Department of Ecology, Faculty of Humanities and Natural Sciences, University of Presov, Slovakia</i>	I-9	OL
9 ³⁰	Michal Piasecki ¹ , Igor Barchiy ² , Marian Sabov ² , Victoria Sabov ² , Artem Pogodin ² , Anatoliy Fedorchuk ³ , Bogdan Andriyevsky ⁵ , L.Bychto, Volodymyr Pavlyuk ^{1,4} , Galina Myronchuk ⁶ , Oleg Khyzhun ⁸ , Tuan Vu ⁷ , M.Rudysh, Michal Brik ^{1,9} . STRUCTURAL, ELECTRONIC AND TRANSPORT PROPERTIES OF THE SELECTED TERNARY AND QUATERNARY SYSTEMS ¹ <i>J.Dlugosz University Czestochowa, Poland</i> ² <i>Uzhhorod National University, Ukraine</i> ³ <i>Lviv National University of Veterinary Medicine and Biotechnologies, Ukraine</i> ⁴ <i>Ivan Franko National University of Lviv, Ukraine</i> ⁵ <i>Koszalin University of Technology, Koszalin, Poland</i> ⁶ <i>Lesya Ukrainka Eastern Volyn National University, Lutsk, Ukraine</i> ⁷ <i>Ton Duc Thang University, Ho Chi Minh City, Vietnam</i> ⁸ <i>Frantsevych Institute for Problems of Materials Science NASciences of Ukraine, Ukraine</i> ⁹ <i>University of Tartu, Tartu, Estonia</i>	I-10	OL
10 ⁰⁰	Svitlana Orysyk ¹ , Polina Novikova ¹ , Viktor Orysyk ² , Yurii Zborovskii ² , Mykhaylo Vovk ² . Pd(II), Pt(II), Ag(I) AND Cu(I) n,π-CHELATE COMPLEXES WITH N-ALLYL SUBSTITUTED THIOUREAS: SPECTRAL CHARACTERISTICS AND BIOLOGICAL ACTIVITY ¹ <i>V.I. Vernadsky Institute of General and Inorganic Chemistry, Kyiv, Ukraine</i> ² <i>Institute of Organic Chemistry, Kyiv, Ukraine</i>	P-16	FtoF
10 ³⁰	Georgii Rozantsev , Serhii Radio, Olena Shved. STATE OF W(VI) IONS IN AQUEOUS-ORGANIC SOLUTIONS. <i>Vasyl' Stus Donetsk National University, Vinnytsia, Ukraine</i>	P-17	FtoF
11 ⁰⁰	<i>Coffe break</i>		

11 ³⁰	Kateryna Terebilenko , Mykola Slobodynik. RECENT ADVANCES IN CRYSTALOCHEMICAL DESIGN OF RARE-EARTH PHOSPHOMOLYBDATES AND PHOSPHOTUNGSTATES PHOSPHORS <i>Taras Shevchenko National University of Kyiv, Ukraine</i>	P-18	FtoF
12 ⁰⁰	O. Trunova , L. Zheleznova, V. Dyakonenko, L. Sliusarchuk, O. Shtokvysh. CRYSTAL STRUCTURES OF TWO NEW Co(II) SUCCINATE COMPLEXES WITH N-DONOR NEUTRAL LIGANDS <i>V.I.Vernadsky Institute of general and inorganic chemistry of the NAS of Ukraine, Ukraine</i>	P-19	OL
12 ³⁰	Oksana Karychort ^{1,2} , Olha Zhak ¹ , Yuri Prots ² , Yuri Grin ² . NEW TERNARY PHOSPHIDES in Dy-Pd-P SYSTEM ¹ <i>Ivan Franko National University of Lviv, Ukraine</i> ² <i>Max Planck Institute for Chemical Physics of Solids, Dresden, Germany</i>	P-20	OL
13 ⁰⁰	<i>Lunch break</i>		
14 ⁰⁰	Poster session (Moderator Marian Sabov)		OL
15 ⁰⁰	<i>Closing of the XXI International Conference on Inorganic Chemistry Ukraine</i>		
15 ³⁰	Excursion to the Uzhhorod castle, local history museum of old Traskarpatia		

POSTER PRESENTATIONS

Section I. Chemistry of inorganic and coordination compounds, including medicinal chemistry and pharmacology.

1.	NEW DATA ON THE CONDITIONS FOR THE SYNTHESIS OF BINARY MANGANESE(II)-COPPER(II) DIHYDROGEN PHOSPHATE <u>Nadiya Antraptseva</u> ¹ , Larysa Koval ² , Oleksandr Vovk ¹ ¹ <i>National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine</i> ² <i>V.I. Vernadskyi Institute of General and Inorganic Chemistry, NAS of Ukraine, Kyiv, Ukraine</i>	
2.	HYDROGEN HALIDES IN ALCOHOL SOLUTIONS: ION-PAIR CONVERSION THERMODYNAMICS <u>Viktor Bulavin</u> , Ivan Vyunnik, Andrii Kramarenko, Oleksandr Rusinov <i>National Technical University "Kharkiv Polytechnic Institute"</i>	
3.	SYNTHESIS AND PROPERTIES OF WATER-SOLUBLE ZIRCONIUM AND HAFNIUM PHTHALOCYANINE COMPLEXES <u>V. Chernii</u> , N. Fedosova, I. Tretyakova, Y. Dovbii, I. Denysenko <i>V.I. Vernadskii Institute of General and Inorganic Chemistry NASU, Kyiv, Ukraine</i>	
4.	SYNTHESIS AND BIOLOGICAL ACTIVITY OF METAL PHTHALOCYANINE COMPLEXES <u>V. Chernii</u> ^a , I. Tretyakova ^a , S. Chernii ^a , M. Losytskyy ^b , Y. Gerasymchuk ^c ^a <i>V.I. Vernadskii Institute of General and Inorganic Chemistry NASU, Kyiv, Ukraine</i> ^b <i>Taras Shevchenko National University, Kyiv, Ukraine</i> ^c <i>Institute of Low Temperature and Structure Research, Polish Academy of Sciences, Wroclaw, Poland</i>	
5.	SYNERGETIC EFFECTS OF d-METAL COMPOUNDS FIXED ON NATURAL ALUMOSILICATES IN THE OXIDATION REACTION OF SULFUR DIOXIDE Tatyana Kiose, Tatyana Rakitskaya, <u>Olesia Daniukina</u> <i>Odesa I.I. Mechnikov National University, 2, Dvoryanskaya St., 65082, Odessa, Ukraine</i>	
6.	SYNTHESIS AND INVESTIGATION OF APATITE-RELATED $Zr^{4+}, Zn^{2+}, CO_3^{2-}$ - CONTAINING CALCIUM PHOSPHATES <u>Lidiia Dremova</u> ¹ , Nataliia Strutynska ¹ , Iryna Grynyuk ² , Olga Vasyliuk ³ , Mykola Slobodyanik ¹ ¹ <i>Taras Shevchenko National University of Kyiv, Ukraine</i> ² <i>Igor Sikorsky Kyiv Polytechnic Institute, Ukraine</i> ³ <i>Zabolotny Institute of Microbiology and Virology, National Academy of Science of Ukraine, Ukraine</i>	
7.	SYNTHESIS AND SPECTRAL PROPERTIES OF LN(III) COMPLEXES WITH SCHIFF BASES – BIS(HYDROXYPHENYLTRIAZOLES) AND PYRIDINOYLHYDRAZONES	

	<p><u>Valeriia Halushchenko</u>^{1,2}, Serhii Smola¹, Natalya Shmatkova², Dmytro Khomenko^{3,4}, Roman Doroshchuk^{3,4}, Oleksandr Korovin¹, Natalya Rusakova¹ ¹<i>O.V.Bogatsky Physico-Chemical Institute of the NAS of Ukraine, Ukraine</i> ²<i>Faculty of Chemistry and Pharmacy, Odesa I.I. Mechnikov National University, Ukraine</i> ³<i>Department of Chemistry Kyiv National Taras Shevchenko University, Ukraine</i> ⁴<i>Enamin LTD, Ukraine</i></p>	
8.	<p>NEW Zn(II) COMPLEXES BASED ON MODIFIED CURCUMIN AS A BASIS FOR THE DEVELOPMENT OF NEW ANTIMICROBIAL DRUGS <u>Horbenko A.E.</u>, Berezhnytska O.S., Trunova O.K., Rohovtsov O.O., Ivakha N.B. <i>V.I. Vernadsky Institute of General and Inorganic Chemistry, National Academy of Sciences of Ukraine, 32/34, Palladin prospect, Kyiv, 03142, Ukraine</i></p>	
9.	<p>Preparation and spectral characteristics of tetranuclear palladium(II) complexes based on 5-substituted 3-(2-pyridyl)-1,2,4-triazoles <u>Hanna V. Ivanova</u>, Dmytro M. Khomenko, Rostyslav D. Lampeka <i>Taras Shevchenko National University of Kyiv, Ukraine</i></p>	
10.	<p>REACTIVITY IN THE SULFUR DIOXIDE – ALKANOL – TRIS(HYDROXYMETHYL)AMINOMETHANE SYSTEMS <u>Ruslan Khoma</u>^{a,b}, Vladimir Gelmboldt^c, Yuriy Ishkov^a, Nadiia Fed'ko^a, Vyacheslav Baumer^d, Magdalina Tsapko^e, Sergey Vodzinskii^{a,b}, Denis Menchuk^a ^a<i>Odessa I.I. Mechnikov National University, Ukraine;</i> ^b<i>Physical-Chemical Institute for Environment and Human Protection of MES of Ukraine and NAS of Ukraine, Ukraine;</i> ^c<i>Odessa National Medical University, Odessa, Ukraine;</i> ^d<i>State Scientific Institution "Institute for Single Crystals" of NAS of Ukraine, Ukraine;</i> ^e<i>Taras Shevchenko National University of Kyiv, Ukraine</i></p>	
11.	<p>SYNTHESIS AND LUMINESCENT STUDY OF Cr³⁺ DOPED GaBO₃ <u>O.V. Khomenko</u>^a, I.V. Berezovskaya^a, S.V. Kuleshov^b, O.K. Trunova^b, V.P. Dotsenko^a, N.P. Efyushina^a ^a<i>A.V. Bogatsky Physico-Chemical Institute, National Academy of Sciences of Ukraine, Lustdorfskaya doroga 86, Odessa, 65080, Ukraine;</i> ^b<i>V.I. Vernadsky Institute of General and Inorganic Chemistry, National Academy of Sciences of Ukraine, 32/34, Palladin prospect, Kyiv, 03142, Ukraine</i></p>	
12.	<p>HETEROMETALLIC MIXED-LIGAND MIXED-ANION Cu/Cd COMPLEX SHOWING SLOW MAGNETIC RELAXATION Olga Vassilyeva,^a <u>Volodymyr Kokozay</u>,^a Urszula Komarnicka,^b Alina Bieńko^b ^a<i>Department of Inorganic Chemistry, Taras Shevchenko National University of Kyiv, 64/13 Volodymyrska Str., Kyiv 01601, Ukraine;</i> ^b<i>Faculty of Chemistry, University of Wrocław, 47 Joliot Curie, 50-137 Wrocław, Poland</i></p>	
13.	<p>SYNTHESIS AND CHARACTERIZATION OF IRON- AND CARBONATE-CONTAINING CALCIUM PHOSPHATES <u>Yeva Komashchenko</u>¹, Nataliia Strutynska¹, Iryna Grynyuk², Olga Vasyliuk³, Mykola Slobodyanik¹ ¹<i>Taras Shevchenko National University of Kyiv, Ukraine</i> ²<i>Igor Sikorsky Kyiv Polytechnic Institute, Ukraine</i> ³<i>Zabolotny Institute of Microbiology and Virology, National Academy of Science of Ukraine, Ukraine</i></p>	
14.	<p>STRUCTURE OF THE BRIDGE VANADIUM (V) COMPLEX WITH N-PHENYL ACETOHYDROXAMIC ACID <u>L.I. Koval</u>, V.I. Dzyuba, E.L. Il'nitskaya, O.O. Shtokvysh, V.V. Dyakonenko <i>V.I. Vernadsky Institute of General and Inorganic Chemistry, NAS of Ukraine, Ukraine</i></p>	
15.	<p>INTERACTION OF PALLADIUM(II) WITH ETHYLENEDIAMINETETRAMETHYLENephosphonic ACID. <u>Oleksandra Kozachkova</u>^a, Natalia Tsaryk^a, <u>Vasyl Pekhnyo</u>^a, Volodymyr Trachevskiy^b, Olha Kachorovska^c ^a<i>Vernadsky Institute of general and inorganic chemistry of the Ukrainian National Academy of Sciences, Ukraine.</i> ^b<i>Technical centre of NAS of Ukraine, National Academy of Sciences of Ukraine, Ukraine.</i> ^c<i>National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute") Ukraine.</i></p>	
16.	<p>INFLUENCE OF THE COMPOSITION OF NICKEL (II) COMPLEXES WITH CITRATE AND MOLYBDATE ON THEIR ELECTROCHEMICAL ACTIVITY</p>	

	V.M. Nikitenko, <u>T.V. Maltseva</u> , E.A. Babenkov, V.S. Kublanovsky <i>Vernadsky Institute of General and Inorganic Chemistry of the Ukrainian NAS, 32-34 Palladina ave., Kyiv 03142, Ukraine,</i>	
17.	THE SALTS OF POLYOXOTUNGSTATES WITH Ln(III)-HETEROATOMS AND Ln(III) CATIONS <u>Oleksandra Mariichak</u> , Serhii Radio, Georgiy Rozantsev <i>Research Laboratory "Chemistry of Polyoxometalates and Complex Oxide Systems", Vasyl' Stus Donetsk National University, Vinnytsia, Ukraine</i>	
18.	The NdNiIn _{1-x} M _x (M = Ge, Sn) solid solutions <u>G. Nychporuk</u> ¹ , M. Horiacha ^{1,2} , O. Hudzo ¹ , A. Zelinskii ¹ , S. Wurmehl ² , V. Zaremba ¹ ¹ <i>Ivan Franko National University of Lviv, Kyryla i Mefodiya Str., 6, 79005 Lviv, Ukraine;</i> ² <i>Leibniz Institute for Solid State and Materials Research (IFW) Dresden, Helmholtzstr. 20, 01069 Dresden, Germany</i>	
19.	SOME PHYSICAL AND CHEMICAL ASPECTS OF THE PREPARATORY STAGES OF THE FORMATION OF PHOTOCATALYTIC ACTIVE COATINGS <u>O. Dryuchko</u> ^{1*} , V. Cherginets ² , V. Soloviev ³ , N. Bunyakina ⁴ , Yu. Golik ⁵ , O. Illiash ⁶ ^{1,3,4,5,6} <i>National University "Yuri Kondratyuk Poltava Polytechnic", 24 Pershotravnevy prospect, 36011, Poltava, Ukraine;</i> ² <i>Institute of scintillation materials of the national academy of sciences of Ukraine, Nauky ave. 60, 61072, Kharkov, Ukraine.</i>	
20.	HYDROTHERMAL DECOMPOSITION OF ZIRCON WITH LOW-CONCENTRATION ALKALINE SOLUTIONS IN THE PRESENCE OF CALCIUM FLUORIDE <u>Tamara Pavlenko</u> , Oleksandr Ivanenko, Anatoly Omelchuk <i>V.I. Vernadskyi Institute of General and Inorganic Chemistry of the Ukrainian NAS, Ukraine</i>	
21.	BIOCOORDINATION ACIDOCOMPLEXES OF GERMANIUM(IV) AS STIMULATORS OF PLANT PHYSIOLOGICAL PROCESSES <u>Dmytro Pechinka</u> ¹ , Mykola Martyniuk ¹ , Olena Martsynko ¹ , Olena Finik ² , Olga Snurnikova ² , Olena Pesaroglo ³ , Inna Seifullina ¹ ¹ <i>Odesa I.I. Mechnikov National University, Ukraine</i> ² <i>LLC "INSPECTORAT UKRAINE", Ukraine</i> ³ <i>Odessa State Agrarian University, Ukraine</i>	
22.	FEATURES OF COMPLEXATION OF GERMANIUM, TIN TETRACHLORIDES WITH AROMATIC AND PYRIDINECARBOXYLIC ACIDS HYDRAZIDES AND THEIR HYDRAZONES <u>Natalia Shmatkova</u> , Inna Seifullina <i>Odessa I. I. Mechnikov National University, Ukraine</i>	
23.	ELECTROCHEMICAL LITHIATION OF THE Y _{5-x} Dy _x Ge ₃ PHASE <u>Shpyrka Z.M.</u> , Krasitska A.M., Kordan V.M., Pavlyuk V.V. <i>Ivan Franko National University of Lviv, Lviv, Ukraine</i>	
24.	THIAZOLOTHIENOPYRIMIDINIUM SYSTEMS WITH ANTIMALARIAL ACTIVITY <u>Mykola Kut</u> ¹ , Diana Kut ¹ , Samanta Cipriano ² , Sarah Maluf ² , Fernanda Ferrara ³ , Mauro Azevedo ⁴ , Adriana Carmona ³ , Mikhailo Onysko ¹ , Vasyl Lendel ¹ , Rodrigo Cunha. ² ¹ <i>Uzhhorod National University, Uzhhorod, Ukraine</i> ² <i>Universidade Federal do ABC, Santo André, Brazil</i> ³ <i>Universidade Federal de São Paulo, São Paulo, Brazil</i> ⁴ <i>Universidade Federal de São Paulo, Santos, Brazil</i>	
25.	КООРДИНАЦІЙНІ СПОЛУКИ 3d-МЕТАЛІВ З ГІДРАЗИДОМ ФЕНІЛОЦТОВОЇ КИСЛОТИ <u>Тарас Мандрій</u> ¹ , Тетяна Кокшарова ² ¹ <i>Відокремлений структурний підрозділ НУБіП України «Бережанський агротехнічний інститут»,</i> ² <i>Одеський національний університет імені І.І. Мечникова, Україна</i>	

Section II. Characterization and properties of new inorganic substances, crystal chemistry.

1.	A SPECTRAL STUDY OF THE STATE OF PROTON-CONTAINING GROUPS IN Mn(II)-Mg HYDROGEN PHOSPHATES <u>Nadiya Antraptseva</u> ¹ , Larysa Koval ² , Andrei Tkachenko ¹ ¹ <i>National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine</i> ² <i>V.I. Vernadskyi Institute of General and Inorganic Chemistry NAS of Ukraine, Kyiv, Ukraine</i>	
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2.	CRYSTAL CHEMISTRY OF $Zr_{12}Pd_{40}Ga_{31}$ AND RELATED HEXAGONAL TERNARY COMPOUNDS Bogdan Kotur, <u>Volodymyr Babizhetskyy</u> <i>Ivan Franko National University of Lviv, Kyryla and Mefodiya Str. 6, 79005 Lviv, Ukraine</i>	
3.	A NEW METHOD TO SYNTHESIZE THE COMPOUND Ti_3SiC_2 <u>A. Broda</u> ¹ , N. Klymentiy ¹ , S. Pukas ¹ , R. Cardoso-Gil ² , Yu. Grin ² , R. Gladyshevskii ¹ ¹ <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i> ² <i>Max-Planck-Institute for Chemical Physics of Solids, Nöthnitzer Str. 40, 01187 Dresden, Germany</i>	
4.	Growth and investigation of functional parameters of Cs_3ZnCl_5 -based scintillators <u>Victor Cherginets</u> , Oleksandr Rebrov, Tetyana Rebrova, Tamara Ponomarenko, Ianina Boyarintseva, Olga Zelenskaya, Oleg Yurchenko* <i>Institute for Scintillation Materials of National Academy of sciences of Ukraine, Kharkiv, Ukraine,</i> <i>*V.N. Karazin Kharkov National University, Kharkiv, Ukraine</i>	
5.	INTERACTION OF THE COMPONENTS IN THE SYSTEMS $Gd-\{Si,Ge\}-\{Sn,Sb\}$ <u>Roman Dankevych</u> , Yaroslav Tokaychuk, Roman Gladyshevskii <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i>	
6.	SYNTHESIS AND CRYSTAL STRUCTURE OF COPPER COORDINATION COMPOUNDS WITH 3-ALLYLSULFANYL-4-ALLYL-5-(2-PYRIDYLE)-4H-1,2,4-TRIAZOLE <u>Dmytro Dmytriv</u> , Yurii Slyvka, Grygoriy Dmytriv, Nazariy Pokhodylo <i>Ivan Franko National University of Lviv, 79005 Lviv, Ukraine</i>	
7.	CRYSTAL STRUCTURE OF NEW TERNARY SILICIDE $ErFe_4Si_2$ L. Fedyna ¹ , V. Mykhalichko ² , A. Fedorchuk ³ , <u>M. Fedyna</u> ⁴ ¹ <i>Ivan Franko National University of Lviv, 1, University Str., Lviv 79000, Ukraine</i> ² <i>Lviv Polytechnic National University, Bandera St. 12, 79013 Lviv, Ukraine</i> ³ <i>S.Z. Gzhytskyj Lviv National University of Veterinary Medicine and Biotechnologies, Pekarska St. 50, 79010 Lviv, Ukraine</i> ⁴ <i>National University of Forest and Wood Technology of Ukraine, Chuprynky St. 103, 79057 Lviv, Ukraine</i>	
8.	STUDY OF THE NEW THERMOELECTRIC MATERIAL $Hf_{1-x}Nb_xNiSn$ <u>Andriy Horyn</u> ¹ , Lyubov Romaka ¹ , Yuriy Stadnyk ¹ , Volodymyr Romaka ² , Volodymyr Pashkevych ² ¹ <i>Ivan Franko National University of Lviv, 6, Kyryla and Mefodiya Str., Lviv 79005, Ukraine,</i> ² <i>National University "Lvivska Politechnika", 12, S. Bandera Str., Lviv 79013, Ukraine</i>	
9.	SURFACE TREATMENT OF $CsPbBr_3$ CRYSTALS <u>Valentyna Ivanitska</u> , Ievgeniia Verzhak, Petro Fochuk <i>Yurii Fed'kovych Chernivtsi National University, Ukraine</i>	
10.	SYNTHESIS, CRYSTAL STRUCTURE, AND PROPERTIES OF B_4C CERAMIC MATERIAL <u>Andriana Ivanushko</u> , Roman Gladyshevskii <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005, Lviv, Ukraine</i>	
11.	INTERACTION OF COMPONENTS IN THE Gd-Mn-Ge TERNARY SYSTEM AT 1070 K <u>Mariya Konyk</u> ¹ , Lyubov Romaka ¹ , Vitaliy Romaka ² , Yuriy Stadnyk ¹ ¹ <i>Ivan Franko National University of Lviv, Kyryla and Mefodiya Str., 79005 Lviv, Ukraine</i> ² <i>Leibniz Institute for Solid State and Materials Research (IFW) Dresden, Helmholtzstr. 20, 01069 Dresden, Germany</i>	
12.	THERMOPHYSICAL PROPERTIES OF $Pr_2Hf_2O_7$ <u>Alla Kopan</u> , <u>Mykola Gorbachuk</u> , Alina Makudera, Dmytro Korablov <i>Frantsevich Institute for Problems of Materials Science of NASU, Ukraine</i>	
13.	$Mo_{2.5}Ru_{5.5}Ge_{13}$ – A NEW REPRESENTATIVE OF THE NOWOTNY CHIMNEY-LADDER PHASES <u>Bohdan Korotoshyn</u> , Nataliya Muts, Lev Akselrud, Yaroslav Tokaychuk, Roman Gladyshevskii <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i>	
14.	FEATURES OF THERMOANALYTICAL RESEARCH OF HYDRATED PHOSPHATES <u>Larysa Koval</u> ¹ , Nadiya Antraptseva ² , Solomiya Voloshchuk ²	

	¹ <i>V.I. Vernadskyi Institute of General and Inorganic Chemistry NAS of Ukraine, Kyiv</i> ² <i>National University of Life and Environmental Sciences of Ukraine, Kyiv</i>	
15.	THE TERNARY SYSTEM Sm–Al–Sn AT 600°C <u>Yurii Kozak</u> , Yaroslav Tokaychuk, Roman Gladyshevskii <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i>	
16.	INTERACTION OF THE COMPONENTS IN THE SYSTEMS {Zr,Hf}–Al–{Si,Ge,Sn,Sb} <u>Danylo Maryskevych</u> , Yaroslav Tokaychuk, Roman Gladyshevskii <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i>	
17.	COMPOUNDS WITH Sc _{0.6} Fe ₂ Si _{4.9} - AND Gd _{1.33} Pt ₃ Al ₈ -TYPE STRUCTURES IN SYSTEMS WITH RARE-EARTH METALS <u>Nataliya Muts</u> , Denys Oleksiuk, Oleg Lesko, Yaroslav Tokaychuk, Roman Gladyshevskii <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i>	
18.	PHASE EQUILIBRIA AND CRYSTAL STRUCTURES OF COMPOUNDS IN THE La–Ni–In SYSTEM <u>G. Nychyporuk</u> , O. Dmytrakh, Ya. Kalychak <i>Ivan Franko National University of Lviv, Kyryla i Mefodiya str., 6, 79005 Lviv, Ukraine</i>	
19.	THE TERNARY SYSTEM Yb–Ga–Sn AT 600°C <u>Illia Ohonovskyi</u> , Yaroslav Tokaychuk, Roman Gladyshevskii <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i>	
20.	SYNTHESIS AND PROPERTIES OF LANTHANUM-SUBSTITUTED SPINEL Zn _(1-x) La _(x) Mn ₂ O ₄ : IMPACT OF LANTHANUM CONCENTRATION ON STRUCTURE AND PHYSICO-CHEMICAL PROPERTIES <u>Oleksii Ivanov</u> , Fesych Igor, Sergii Nedilko <i>Taras Shevchenko National University of Kyiv, Ukraine</i>	
21.	SYNTHESIS AND CRYSTAL STRUCTURE OF THE NOVEL MgNi ₆ Ge ₆ and MgPd ₆ Ge ₆ TERNARY COMPOUNDS <u>Nazar Pavlyuk</u> ¹ , Grygoriy Dmytriv ¹ , Wojciech Ciesielski ² , and Volodymyr Pavlyuk ^{1,2} ¹ <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla and Mefodiya str. 6, 79005 Lviv, Ukraine</i> ² <i>Institute of Chemistry, Jan Dlugosz University of Czestochowa, al. Armii Krajowej 13/15, 42-200 Czestochowa, Poland</i>	
22.	TAILORED MICROWAVE DIELECTRIC PROPERTIES IN PEROVSKITE CERAMICS 1-xLn(Mg _{0.5} Ti _{0.5})O ₃ -x[Ca,Sr,La]TiO ₃ Tetiana Plutenko, <u>Oleg Vyunov</u> , Oleksandr Fedorchuk, Leonid Kovalenko, Oleg Yanchevskii, Anatolii Belous <i>V. I. Vernadsky Institute of General & Inorganic Chemistry of the NAS of Ukraine, Kyiv, Ukraine</i>	
23.	NEW REPRESENTATIVES OF THE STRUCTURE TYPE TbFe ₄ Al _b Si ₆ Anastasia Parashchuk, Natalia Lesyk, <u>Svitlana Pukas</u> , Roman Gladyshevskii <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i>	
24.	SYSTEMS Ba _{1-x} (Na _{0.5} Ln _{0.5}) _x MoO ₄ AND THE SECOND RULE OF POLARITY OF ISOVALENT ISOMORPHISM Eugeni Get'man, <u>Serhii Radio</u> <i>Vasyl' Stus Donetsk National University, Vinnytsia, Ukraine,</i>	
25.	CRYSTAL STRUCTURE OF THE HYDRIDE Tb ₂ Ni ₂ GaH _{5.1} <u>Nazar Saidov</u> , Khrystyna Miliyanchuk, Roman Gladyshevskii <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Ukraine</i>	
26.	NEW QUATERNARY COMPOUNDS R ₅ Ni ₃ Al ₃ Si ₄ (R = RARE-EARTH) <u>Nataliya Semuso</u> , Marharyta Lanovska, Svitlana Pukas, Roman Gladyshevskii <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i>	
27.	ELECTRICAL PROPERTIES AND RECRYSTALLIZATION EFFECTS IN Ag _{6+x} P _{1-x} Ge _x S ₅ I- BASED CERAMICS <u>Iryna Shender</u> ¹ , Artem Pogodin ¹ , Mykhailo Filep ^{1,2} , Tetyana Malakhovska ¹ , Oleksandr Kokhan ¹ , Leonid Suslikov ¹ ¹ <i>Uzhhorod National University, Ukraine,</i>	

	<i>^cFerenc Rákóczi II Transcarpathian Hungarian Institute, Ukraine</i>	
28.	PEROVSKITE PHASE IN THE SYSTEM Sm–Pd–Si <u>Kateryna Stepanovych</u> , Oksana Zaremba, Yaroslav Tokaychuk, Roman Gladyshevskii <i>Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i>	
29.	NEW TERNARY INDIDES WITH STRUCTURES BASED ON INTERGROWTH OF AIB ₂ -AND CsCl-TYPE RELATED SLABS <u>Yuriy Tyvanchuk</u> ^a , Volodymyr Babizhetskyy ^a , Volodymyr Smetana ^b , Stanisław Baran ^c , Andrzej Szytuła ^c ^a <i>Department of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla and Mefodiya 6, 79005 Lviv, Ukraine</i> ^b <i>Department of Biological and Chemical Engineering and iNANO, Aarhus University, Åbogade 40, 8200 Aarhus N, Denmark</i> ^c <i>Jagiellonian University, Faculty of Physics, Astronomy and Applied Computer Science, M. Smoluchowski Institute of Physics, prof. Stanisława Łojasiewicza 11, PL-30-348 Kraków, Poland</i>	
30.	CONTRIBUTION OF “DIFFUSIVE” MODES TO THERMAL CONDUCTIVITY IN FERRIELECTRIC CuInP ₂ S ₆ CRYSTALS V. Liubachko, R. Yevych, A. Pogodin, <u>Yu. Vysochanskii</u> <i>Uzhhorod National University, Uzhhorod, 88000, Ukraine</i>	
31.	EXTENDING THE INVESTIGATION OF R–A–Mn–O SYSTEMS (R = rare earth metal, A = alkali earth metal) <u>Oksana Zaremba</u> , Iryna Zaniuk, Mariana Hembarska, Roman Gladyshevskii <i>Ivan Franko National University of Lviv, Kyryla i Mefodiya St. 6, 79005 Lviv, Ukraine</i>	
32.	КРИСТАЛІЧНА СТРУКТУРА ТЕРНАРНИХ АЛЮМІНІДІВ У СИСТЕМІ Tm–Ag–Al <u>Ольга Жак</u> , Василь Коліда, Оксана Каричорт <i>Львівський національний університет імені Івана Франка, вул. Кирила і Мefодія, 6, 79005 Львів, Україна</i>	
33.	ФІЗИКО-ХІМІЧНА ВЗАЄМОДІЯ В СИСТЕМІ Tl ₂ S–CdS–GeS ₂ Піскач Людмила ¹ , <u>Селезень Андрій</u> ^{2*} , Гулай Любомир ¹ ¹ <i>Волинський національний університет імені Лесі Українки, Україна</i> ² <i>Національний університет водного господарства та природокористування, Україна</i>	
34.	ПОЛІОКСОВОЛЬФРАМАТИ КОБАЛЬТУ(II) У ВОДНО-ДМФА РОЗЧИНІ <u>Шмирко О.В.</u> , Книжник І. А., Радіо С.В., Розанцев Г. М. <i>Донецький національний університет імені Василя Стуса, Вінниця, Україна</i>	

Section III. Physical inorganic chemistry, nanochemistry.

1.	Features of carbohalogenation of Eu ₂ O ₃ -containing melts of KX–SrX ₂ (X=Cl, Br) composition with various ratios of the constituent parts at 973 K <u>Victor Cherginets</u> , Oleksandr Rebrov, Tetyana Rebrova, Tamara Ponomarenko, Oleg Yurchenko* <i>Institute for Scintillation Materials of National Academy of sciences of Ukraine, Kharkiv, Ukraine,</i> <i>V.N. Karazin Kharkov National University, Kharkiv, Ukraine</i>	
2.	INFLUENCE OF FERRITE PARAMETERS ON CHARACTERISTICS OF COMPOSITE DIELECTRIC-FERRITE ELEMENTS FOR MICROWAVE APPLICATIONS <u>Oleksandr Fedorchuk</u> , Oleg V'yunov, Plutenko Tetiana, Anatolii Belous <i>V. I. Vernadsky Institute of General & Inorganic Chemistry of the NAS of Ukraine, Ukraine</i>	
3.	NANOSCALE HYBRID SYSTEMS BASED ON A HETEROMETALLIC CURCUMINATE COMPLEX OF Zn(II) AND Ag(I) <u>Nadiia Ivakha</u> ^{1,2} , Oleksandra Berezhnyska ^{1,2} , Oleksandr Rohovtsov ¹ , Olena Trunova ¹ ¹ <i>V.I. Vernadsky Institute of General and Inorganic Chemistry of the NAS of Ukraine, Kyiv, Ukraine</i> ² <i>National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute», Kyiv, Ukraine</i>	
4.	Thermodynamic and kinetic features of CsPbBr ₂ Cl crystallization processes <u>О. Kopach</u> , V. Kopach, P. Fochuk <i>Yuriy Fedkovych Chernivtsi National University, Ukraine</i>	
5.	NEW METHOD OF SYNTHESIS OF PHOTOACTIVE SYSTEMS BASED ON TITANIUM DIOXIDE <u>Q. M. Korduban</u> ¹ , V. M. Ogenko ¹ , T. V. Kryshchuk ¹ , M. M. Medvedskij ² ¹ <i>V.I. Vernadsky Institute of General and Inorganic Chemistry of the National Academy of Sciences of Ukraine, 32/34 Academic Palladin ave., 03142 Kyiv, Ukraine;</i>	

	<i>⁴Main astronomical observatory of National Academy of Sciences of Ukraine, 27 Akademich Zabolotnoho Str., 03143 Kyiv, Ukraine</i>	
6.	STUDY OF PROCESSES OF MODIFICATION OF THE SURFACE OF TiO ₂ NANOPOWDER UNDER THE ACTION OF HYDROGEN PEROXIDE <u>O. M. Korduban</u> ¹ , V. V. Trachevskyi ² ¹ V.I. Vernadsky Institute of General and Inorganic Chemistry of the National Academy of Sciences of Ukraine, 32/34 Academic Palladin ave., 03142 Kyiv, Ukraine; ² Technical Center of the NAS of Ukraine, 13 Pokrovska str., 04070 Kyiv, Ukraine	
7.	MODELING OF EQUILIBRIA IN THE ACIDIFIED SOLUTIONS OF SODIUM ORTHOTUNGSTATE IN THE PRESENCE OF STRONTIUM CATIONS <u>Oleksii Kordysh</u> , Ivan Knyzhnyk, Georgii Rozantsev <i>Vasyl' Stus Donetsk National University, Vinnytsia, Ukraine</i>	
8.	PREPARATION OF CdS (NPs) / POLYVINYLPIRROLIDONE BASED FILMS <u>Kristina Molnar</u> ¹ , Viktoria Farkas ¹ , Mykhailo Filep ^{1,2} ¹ Ferenc Rákóczi II Transcarpathian Hungarian Institute, Ukraine ² Uzhhorod National University, Ukraine	
9.	Catalytic activity of nanocomposites with reduced graphene oxide and different size fractions of aluminum oxide in the hydrogenation reaction of ethane <u>Nosach V.V.</u> ^{1,2} , Maksiuk A.V. ^{1,2} 1 National University "Kyiv-Mohyla Academy" 04655, Kyiv, str. Hryhoriya Skovorody, 2; 2 Institute of Physical Chemistry named after L. V. Pisarzhevsky National Academy of Sciences of Ukraine, 31 Nauky Ave., Kyiv	
10.	PROMISING ELECTROCATALYSTS OF Fe-N-C TYPE FOR OXYGEN REDUCTION BASED ON IRON PHTHALOCYANINES AS PRECURSORS <u>Yuriy Pirskeyy</u> , Fedir Manilevich, Andrii Kutsyi, Alina Bogdanova <i>V.I. Vernadsky Institute of General and Inorganic Chemistry, NAS of Ukraine</i>	
11.	COMPARISON OF THE FORMATION OF COPPER(II) ISOPOLYTUNGSTATES IN ACIDIFIED AQUEOUS-DIMETHYLFORMAMIDE SOLUTIONS OF SODIUM ORTHOTUNGSTATE AT DIFFERENT DIMETHYLFORMAMIDE CONCENTRATIONS <u>Alina Popova</u> , Ivan Knyzhnyk, Serhii Radio, Georgii Rozantsev <i>Vasyl' Stus Donetsk National University, Ukraine</i>	
12.	LIQUID CRYSTALLINE NANOCOMPOSITES WITH CARBON NANOPARTICLES Tatiana Mirnaya ^a , <u>Galyna Yaremchuk</u> ^a , Oleg Yanko ^a , Anatolii Tolochko ^b , Dmitriy Zulai ^b , Gertruda Klimusheva ^b ^a V.I. Vernadsky Institute of General and Inorganic Chemistry of National Academy of Sciences, Ukraine, ^b Institute of Physics of National Academy of Sciences, Ukraine	

Section IV. Dual-use materials, alternative energy sources, environmental chemistry.

1.	INFLUENCE OF HEAT TREATMENT TEMPERATURE ON INVERSION DEGREE OF NANOCRYSTALLINE MgAl ₂ O ₄ SPINEL <u>V. Hreb</u> , V. Stadnik, L. Vasylechko, S. Ubizskii <i>Lviv Polytechnic National University, Ukraine</i>	
2.	CORROSION RESISTANCE IN 3% NaCl SOLUTION OF PLASMA COATINGS CONTAINING MAX PHASE Cr ₂ AlC N.V. Vigilianska, <u>C. V. Iantsevitch</u> , Z.G. Ipatova, O.P. Gryshchenko <i>E.O. Paton Electric Welding Institute of NAS of Ukraine</i> 11, Kazymyr Malevych St., Kyiv, 03150, Ukraine	
3.	CORROSION RESISTANCE IN 3% NaCl SOLUTION OF PLASMA COATINGS CONTAINING MAX PHASE Cr ₂ AlC N. Vigilianska, <u>C. Iantsevitch</u> , Z. Ipatova, O. Gryshchenko <i>E. O. Paton Electric Welding Institute of NAS of Ukraine</i> 11, Kazymyr Malevych St., Kyiv, 03150, Ukraine	
4.	ON SOME ASPECTS OF ENVIRONMENTAL PROTECTION <u>Larysa Koval</u> ¹ , Nadiya Antraptseva ² , Polina Filipova ² ¹ V.I. Vernadsky Institute of General and Inorganic Chemistry NAS of Ukraine, Kyiv, Ukraine ² National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine	
5.	GREEN SYNTHESIS OF NEW HYBRID LEAD-FREE 0-D-PEROVSKITE-LIKE MATERIALS ¹ Sidey Vasyi, ¹ Fizer Maksym, ¹ Milyovich Stepan, ¹ Fizer Oksana, ¹ Slyvka Maryna, ² Mariychuk Ruslan, ¹ Slyvka Mykhailo	

	¹ <i>Uzhhorod National University, Ukraine</i> ² <i>University of Presov, Slovak Republic</i>	
6.	THE METHOD OF TiOF ₂ PARTICLES SYNTHESIS OUT OF FLUORIDE SOLUTIONS <u>D. Sofronov</u> ^a , O. Lebedynskiy ^b , M. Rucki ^c , P. Mateychenko ^a a <i>Institute for Single Crystals National Academy of Sciences of Ukraine, Ukraine</i> b <i>State Scientific Institution "Institute for Single Crystals", National Academy of Sciences of Ukraine, Ukraine</i> c <i>Casimir Pulaski Radom University, Poland</i>	
7.	ASSESSMENT OF THE ECOLOGICAL STATUS OF SMALL RIVERS FOR THE BIOACCUMULATION OF HEAVY METALS AND RADIONUCLIDES BY ABORIGINAL ICHTHYOFAUNA ¹ <u>Sergii Sukharev</u> , ¹ Khrystyna Cherevko, ¹ Oksana Sukhareva, ² Ruslan Mariychuk ¹ <i>Uzhhorod National University, Ukraine</i> ² <i>University of Presov, Slovak Republic</i>	
8.	Comparative study of the photocatalytic decomposition of polycyclic aromatic hydrocarbons on TiO ₂ and TiOF ₂ nanoparticles <u>Alvard Timonina</u> ¹ , Ilias Shcherbakov ¹ , Olena Hryshyna ¹ , Kostiantyn Belikov ^{1,2} ¹ <i>State Scientific Institution "Institute for Single Crystals" of NASU, Ukraine</i> ² <i>V.N. Karazin Kharkiv National University, Ukraine</i>	
9.	THE COAGULANTS-FLOCCULANTS INFLUENCE ON THE DEHYDRATION OF SEDIMENTS FROM ANAEROBIC BIOREACTORS Dmytro Kamenskyh ^{1,2} , <u>Tetiana Tkachenko</u> ¹ , Olha Haidai ¹ , Vitaliy Yevdokymenko ¹ ¹ <i>V.P. Kukhar Institute of Bioorganic Chemistry and Petrochemistry of the National Academy of Sciences of Ukraine, Ukraine</i> ² <i>V. Bakul Institute for Superhard Materials of the National Academy of Sciences of Ukraine, Ukraine</i>	
10.	MULTI-INFORMATIVE THERMO-SOLVATO-HALOCHROMIC CHEMOSENSORS BASED ON 4-HYDROXYSTYRYL DYES <u>Yuliya Zhukova</u> ^a , Yaroslav Studenyak ^a , Ruslan Mariychuk ^b ^a <i>Uzhhorod National University, Ukraine;</i> ^b <i>University of Presov, Slovakia</i>	