

## LECTURE PROGRAM

### Invited lectures:

*Prof. Mieczysław MAKOSZA (Warsaw, Poland)*

*Prof. Thierry OLLEVIER (Qubec, Canada)*

*Prof. Khaled MESBAH (Constantine, Algeria)*

*Dr. Sebastien GOEB (Angers, France)*

*Dr. Sergii RUDIUK (Paris, France)*

### Plenary lectures:

*Prof. Remi CHAUVIN (Toulouse, France)*

*Prof. Zoia VOITENKO (Kyiv, Ukraine)*

*Dr. Valerie MARAVAL (Toulouse, France)*

*Prof. Sanjib GHOSH (Kolkata, India)*

*Dr. Stephane MAZIERES (Toulouse, France)*

*Prof. Vitaliy KALCHENKO (Kyiv, Ukraine)*

*Prof. Eric MANOURY (Toulouse, France)*

*Dr. Pamela PASETTO (Le Mans, France)*

*Dr. Oleg KALUGIN (Kharkiv, Ukraine)*

*Dr. Clément ROUX (Toulouse, France)*

*Prof. Mustapha KACI (Bejaia, Algeria)*

*Dr. Lionel SALMON (Toulouse, France)*

*Dr. Alexander ROSHAL (Kharkiv, Ukraine)*

*Dr. Emmanuel GRAS (Toulouse, France)*

*Dr. Yevgen KARPICHEV (Kyiv, Ukraine / Tallin, Estonia)*

*Dr. Daniel PLA (Toulouse, France)*

*Dr. Svitlana SHISHKINA (Kharkiv, Ukraine)*

*Dr. Christophe COUDRET (Toulouse, France)*

*Dr. Oleg PALAMARCIUC (Chisinau, Republic of Moldova)*

*Dr. Céline PICHON (Toulouse, France)*

*Dr. Aurelian ROTARU (Suceava, Romania)*

*Dr. Eric DEYDIE (Toulouse, France)*

*Dr. Tatiana PALAMARCIUC (Chisinau, Republic of Moldova)*

### Young invited lecturers that participated in cooperation between Ukraine and

#### France:

*Dr. Sergii RUDIUK*  
*Dr. Illia GURALSKYI*  
*Dr. Oleksandr KONIEV*  
*Dr. Mykhailo VYBORNYI*  
*Dr. Viacheslav ZGONNIK*

*Serhii KRYKUN*  
*Oleh STETSIUK*  
*Kateryna BRETOSH*  
*Olena KULESHOVA*  
*Valerii BUKHANKO*

## SCIENTIFIC PROGRAM

Plenary lecture (CP)- 30 min + 5 min for questions;  
 Invited conference (CI) - 20 min + 5 min for questions;  
 Oral Communication 1 - 12 min + 3 min for questions.  
 Oral Communication 2 - 8 min + 2 min for questions.

Tuesday, 6<sup>th</sup> June 2017

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| 08:30   | <b>Participant registration</b>   |
| 09:30-10:00                                   | <b>Opening Ceremony</b><br><i>Iu.VOLOVENKO, Dean of Chemical Faculty "Conference participants and guests greetings".</i><br><i>Honored guests of the conference congratulations: Administration of Taras Shevchenko National University of Kyiv, the French Embassy in Ukraine, Kyiv City Administration, Toulouse City Hall.</i><br><b>Z.VOITENKO, R.CHAUVIN</b> "Advances in the scientific cooperation and conference Kyiv-Toulouse" |
| <b>Session 1. Chairmen: Stéphane Mazieres</b> |   |
| 10:00-10:30                                   | <b>Mieczysław MAKOSZA</b><br><i>How does nucleophilic aromatic substitution really proceeds</i>   |
| 10:35-11:05                                   | <b>Remi CHAUVIN</b><br><i>Bio-inspired acetylenic lipids as antitumor agents: progress and prospects</i>  |
| 11:10-11:30                                   | <b>Zoia VOITENKO</b><br><i>Isoindoles and more: theory and practice (dedicated to the 100-th anniversary of F.S. Babichev)</i>  |
| 11:35-11:50                                   | <b>Coffee break</b>   |
| <b>Session 2a. Chairmen: Valérie Maraval</b>  |   |
| 11:50-12:10                                   | <b>Vitaly KALCHENKO</b><br><i>Chiral calixarenes: synthesis, structure and enantiodiscrimination properties</i>   |
| 12:15-12:35                                   | <b>Thierry OLLEVIER</b><br><i>Development of green acid catalysts for asymmetric synthesis</i>  |
| 12:40-13:00                                   | <b>Sebastien GOEB</b><br><i>Controlling the Guest Release from Electro-Active Self-Assembled Cages</i>  |
| 13:05-13:20                                   | <b>Alexander ROSHAL</b><br><i>In search for systems with double proton transfer in the excited state</i>  |
| 13:30-14:30                                   | Lunch Break   |

## Session 2b. table "Chemistry for hydrogen technologies"

Chairmen: Viacheslav Zgonnik – Vadim Pavlenko

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|-------------|---|
| 11:50-12:10 | <b>Viacheslav ZGONNIK</b><br><i>Current developments in hydrogen energy technologies and the role of chemistry in it</i>  |
| 12:15-12:35 | <b>Oleksandr VASYLYEV</b><br><i>From powder to power: Ukrainian way</i>   |
| 12:40-12:55 | <b>Volodymyr SHEMET</b><br><i>Long-term behaviour of ferritic steel interconnects in contact with ceramic and metallic materials of SOFC stack during service</i> |
| 13:00-13:15 | <b>Dmytro FEDOROV</b><br><i>Hydrogen as reducing agent for metal powders production</i>   |
| 13:20-13:35 | <b>Mykola BRYCHEVSKYI</b><br><i>The quasi-perpetual electricity generating device based on ceramic fuel cell for closed systems</i>                               |
| 13:40-14:40 | Lunch Break   |

## Session 3a. table "Chemistry for hydrogen technologies" (Continuation)

Chairmen: Viacheslav Zgonnik – Zoia Voitenko

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| 14:40-15:00                | <b>Larysa KHOMENKOVA</b><br><i>Thermally stimulated processes in Cu-doped Y-stabilized ZrO<sub>2</sub> nanopowders</i>   |
| 15:05-15:20                | <b>Oleg V'YUNOV</b><br><i>Zirconium oxide stabilized by scandium (III) and cerium (IV) complex oxides as the basis for preparation of thick films and multilayer structures for low temperature (600 °C) fuel cell</i> |
| 15:25-15:40                | <b>Ihor POLISHKO</b><br><i>Comparison of tape casted SOFC based on Ukrainian 8YSZ with commercial SOFC</i>   |
| 15:45-16:45<br>17:35-18:35 | <b>Round table "Chemistry for hydrogen technologies"</b>   |
| 16:45-17:35                | <b>Coffee break and Poster Session 1</b>   |

## Session 3b. Spin-crossover materials. Chairmen: Igor Fritsky

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| 14:30-14:50 | <b>Lionel SALMON</b><br><i>Guest effects on spin crossover materials</i>  |
| 14:55-15:15 | <b>Aurelian ROTARU</b><br><i>Pressure effect on the electrical properties of [Fe(Htrz)<sub>2</sub>(trz)](BF<sub>4</sub>) spin crossover complex</i> |
| 15:20-15:35 | <b>Ilia GURALSKYI</b><br><i>Spin transitions in heterometallic cyano-bridged frameworks</i>   |
| 15:40-15:55 | <b>Tatiana PALAMARCIUC</b><br><i>Iron coordination compounds and spin crossover</i>   |

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| 16:00-16:15                                  | <b>Olesia KUCHERIV</b><br><i>Spin-crossover materials for the microwave radiation switching</i>   |
| 16:20-16:35                                  | <b>Oleg PALAMARCIUC</b><br><i>Rational design of coordination compounds based on thiosemicarbazide ligands</i>  |
| 16:35-17:35                                  | <b>Coffee break and Poster Session 1</b>  |
| <b>Session 4. Chairmen: Yevgen Karpichev</b> |   |
| 17:40-18:00                                  | <b>Oleg KALUGIN</b><br><i>Mixtures of room temperature ionic liquids with molecular solvents: microscopic understanding of the macroscopic properties</i>                           |
| 18:05-18:25                                  | <b>Emmanuel GRAS</b><br><i>Towards alternative routes for Radiofluorination</i>   |
| 18:30-18:45                                  | <b>Mustapha KACI</b><br><i>The Effects of PHBV-g-MA and Halloysite on Morphology and Properties of poly(3-Hydroxybutyrate-Co-3-Hydroxyvalerate) /Poly(Butylene Succinate) Blend</i> |
| 18:50-19:05                                  | <b>Alexander KONIEV</b><br><i>Protein-Drug Conjugates as Targeted Cancer Therapies</i>  |
| 19:05  | <b>Get-together party</b>   |

Wednesday, 7<sup>th</sup> June 2017

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| <b>Session 5. Chairmen: Remi Chauvin</b>      |  |
| 09:00-09:30                                   | <b>Valérie MARAVAL</b><br><i>Carbo-mers for two-photon absorption: design, synthesis and properties</i>  |
| 09:35-09:55                                   | <b>Yevgen KARPICHEV</b><br><i>Surface active ionic liquids (SAILs): to squeeze between biodegradability and toxicity constrains</i>                |
| 10:00-10:20                                   | <b>Stéphane MAZIERES</b><br><i>The use of <math>^{31}\text{P}/^{119}\text{Sn}</math> NMR for monitoring RAFT polymerization</i>                    |
| 10:25-10:40                                   | <b>Khaled MESBAH</b><br><i>Reactivity of quinoline backbone compounds</i>  |
| 10:40-10:55                                   | <b>Coffee break</b>  |
| <b>Session 6. Chairmen: Larisa Kunitskaya</b> |  |
| 10:55-11:15                                   | <b>Pamela PASETTO</b><br><i>Functional oligoisoprenes from natural and waste rubber: useful building blocks for biobased elastomeric materials</i> |
| 11:20-11:40                                   | <b>Sanjib GHOSH</b><br><i>Enhanced Antenna Effect through Encapsulation of the Probe Within</i>  |

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|  | <i>Suitable Proteins or Nanosized Confined Environment in Aqueous Medium at Physiological pH: Development of Imaging / Drug Delivery Technique</i>  |
| <b>11:45-12:00</b>                           | <b>Clément ROUX</b><br><i>Design, synthesis and formulation of a biocompatible hydrogel with photocontrolled rigidity</i>                           |
| <b>12:05-12:25</b>                           | <b>Tatyana ZHELTONOZHSKAYA</b><br><i>Micellar and micelle-like nanoreactors for synthesis of silver nanoparticles</i>                               |
| <b>12:30-12:45</b>                           | <b>Vladyslav VOLOSHYNETS</b><br><i>Regulation of the properties of aqueous polymer dispersions and their application to form coatings and films</i> |
| <b>12:50-13:50</b>                           | Lunch Break   |
| <b>Session 7. Chairmen: Eric Manoury</b>     |   |
| <b>13:50-14.10</b>                           | <b>Christophe COUDRET</b><br><i>New paradigm in photocatalysis : a numerical exploration</i>  |
| <b>14:15-14:30</b>                           | <b>Larisa KUNITSKAYA</b><br><i>Double hydrophilic block copolymers and their activity in the anticancer drug delivery</i>                           |
| <b>14:35-14:50</b>                           | <b>Mirela ZALTARIOV</b><br><i>Iminodiacetate-thiosemicarbazone derivatives with high antiproliferative activity</i>                                 |
| <b>14:55-15:15</b>                           | <b>Nataliya PINCHUKOVA</b><br><i>Intensification of ion-exchange processes by means of low-powered ultrasound</i>                                   |
| <b>15:20-15:35</b>                           | <b>Daniel PLA</b><br><i>The versatility of P-block elements: from frustrated lewis pairs to C-H activation</i>                                      |
| <b>15:40-15:45</b>                           | <b>Tetiana KHRISTOVA</b><br><i>SciFinder - the choice for chemistry research</i>  |
| <b>15:45-16:25</b>                           | <b>Coffee break and Poster Session 2</b>  |
| <b>Session 8. Chairmen: Alexander Roshal</b> |   |
| <b>16:25-16:45</b>                           | <b>Eric MANOURY</b><br><i>Well-Defined Core-shell Functionalized Polymers as Nanoreactors for Biphasic Catalysis</i>                                |
| <b>16:50-17:05</b>                           | <b>Svitlana SHISHKINA</b><br><i>The formation and properties of polymorphic modifications from energetic viewpoint</i>                              |
| <b>17:10-17:30</b>                           | <b>Sergii RUDIUK</b><br><i>Non-covalent approaches for the dynamic control of DNA-based materials</i>   |

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| 17:35-17:50 | <b>Nicu-Cosmin OSTACHE</b><br><i>Straightforward synthesis towards diversely functionalized pyrazolo[3,4-d]thiazoles</i>                               |
| 17:55-18:07 | <b>Valerii BUKHANKO</b><br><i>The enhancement of conjugation in terpyridine ligands and its effect on NO release from ruthenium-nitrosyl complexes</i> |
| 18:10-18:22 | <b>Olena KULESHOVA</b><br><i>Toward the synthesis of fully substituted 4-hetarylazoles</i>   |
| 18:30       | Dinner/The cultural program  |

Thursday, 8<sup>th</sup> June 2017

**Session 9. Chairmen: Sebastien Goeb**

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| 09:00-09:20 | <b>Aleksandr KOSTYUK</b><br><i>C-phosphorylated N,N,N'-trisubstituted formamidines</i>   |
| 09:25-09:45 | <b>Mykola PONOMAREV</b><br><i>-Bromo-2-pentene – an Excellent Model Substrate for Evaluation of Reactivity in Unimolecular Heterolysis Reactions</i> |
| 09:50-10:10 | <b>Alejandro ENRIQUEZ</b><br><i>Study of the effect of an electron donor in Ruthenium Nitrosyl (NO) complexes with NO release capabilities</i>       |
| 10:15-10:35 | <b>Roman RODIK</b><br><i>Polycationic Amphiphilic Calix[4]arenes: Bio-Medical Potential</i>  |
| 10:40-10:55 | <b>Coffee break</b>  |

**Session 10. Chairmen: Emmanuel Gras**

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| 10:55-11:15 | <b>Petro ONYS'KO</b><br><i>New strategy for the synthesis of biorelevant aminophosphonic acid derivatives</i>  |
| 11:20-11:40 | <b>Nikolai KOROTKIKH</b><br><i>Efficient catalysis of organic reactions by carbenes and carbene complexes of transition metals for the solution of ecological problems</i> |
| 11:45-12:00 | <b>Céline PICHON</b><br><i>Supramolecular organization of 3d heptacoordinated complexes: towards mononuclear and heterometallic molecule-based magnets</i>                 |
| 12:00-12:15 | <b>Rashid AHMAD</b><br><i>Separation and Recovery of Tanneries Waste Dyes: A Cost Effective Approach</i>   |
| 12:20-12:35 | <b>Eric DEYDIER</b><br><i>Straightforward synthesis of ferrocenyl allylic compounds</i>  |
| 12:40-13:40 | Lunch Break  |

## Session 11. Chairmen: Nataliia Kutcevol

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| 13:40-13:55 | <b>İlknur TOSUN SATIR</b><br><i>Biosorption potential of a waste biomass eros testa : removal of acid red 1 dyes from textile waste water</i>   |
| 14:00-14:15 | <b>Anton CHYRKIN</b><br><i>Promoting external alumina scaling on Ni-base alloy 602 CA during high temperature oxidation</i>   |
| 14:20-14:35 | <b>Angelica VLAD</b><br><i>Coordination polymers of Mn<sup>2+</sup> and Zn<sup>2+</sup> ions built with a bent silicon dicarboxylate ligand: synthesis, structural characterization and luminescence properties</i> |
| 14:40-14:55 | <b>Oleksandr ROIK</b><br><i>Liquid, solid and as-quenched Al-T-Si (T = Fe, Co, Ni) alloys</i>   |
| 15:00-15:15 | <b>Evgheii GONCEARENCO</b><br><i>Luminescence of Mn doped zinc oxide powders</i>  |
| 15:20-15:35 | <b>Aydin TAVMAN</b><br><i>Synthesis and characterization of new asymmetric bis-benzimidazoles and their Zn(II) complexes</i>  |
| 15:40-16:15 | <b>Coffee break and Poster Session 3</b>  |

## Session 12. Chairmen: Thierry Ollevier

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| 16:15-16:30 | <b>Oleksandr GRYGORENKO</b><br><i>Navigating the lead-oriented chemical space using exit vector plots</i>                          |
| 16:35-16:50 | <b>Muhammad NAVEED UMAR</b><br><i>New picolylamine template organo-catalyst for enantioselective aldol reactions</i>               |
| 16:55-17:10 | <b>Dobrochna RABIEJ</b><br><i>Changes of antioxidant capacity of refined rapeseed oil fortified with phenolipids during frying</i> |
| 17:15-17:30 | <b>Dmytro SYSOIEV</b><br><i>Fluorescent diarylethenes for applications in super resolution microscopy</i>                          |
| 17:30-18:00 | <b>Closing Ceremony</b>  |
| 18:30       | <b>Conference dinner</b>   |

Friday, 9<sup>th</sup> June 2017

## Session 13a. Chairmen: Lionel Salmon

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| 09:00-09:12 | <b>Mykhailo VYBORYNI</b><br><i>Designing mechanochemical activity in DNA hydrogels using supramolecular polymers</i> |
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| 09:15-09:27                                     | <b>Oleg LOZINSKI</b><br><i>Prenyl-containing coumarins as selective estrogen receptor modulators</i>   |
| 09:30-09:42                                     | <b>Oleksandr SHTYKA</b><br><i>Supercritical alcohol based liquefaction of lignocellulosic biomass</i>  |
| 09:45-09:57                                     | <b>Oleksandr KOBZAR</b><br><i>N-Phenacylthiazolium derivatives as inhibitors of cholinesterases</i>  |
| 10:00-10:12                                     | <b>Serhii KRYKUN</b><br><i>New electron-rich redox-active self-assembled cages</i>   |
| 10:15-10:27                                     | <b>Vladyslav BULDENKO</b><br><i>Sulfonylcalix[4]arene as a new scaffold for designing inhibitors of protein tyrosine phosphatases</i>              |
| <b>Session 13b. Chairmen Oleksandr Roik</b>     |  |
| 09:00-09:20                                     | <b>Dmytro KHOMENKO</b><br><i>Diversification strategies for synthesis of 1,2,4-triazoles</i>   |
| 09:25-09:37                                     | <b>Dina KYTOVA</b><br><i>Approaches to targeted cluster rhenium(III) compounds delivery to tumour cells</i>  |
| 09:40-09:52                                     | <b>Natalia KARIAKA</b><br><i>Phenyl-containing carbacylamidophosphates as lanthanide emission sensitizers</i>                                      |
| 09:55-10:07                                     | <b>Oleksandr VASHCHENKO</b><br><i>Coordination compounds of uranyl ion with 1,2,4-triazole derivatives</i>   |
| 10:10-10:22                                     | <b>Kostiantyn SHVYDENKO</b><br><i>Reduction of fused imidazole derivatives</i>   |
| 10:30-10:50                                     | <b>Coffee break</b>  |
| <b>Session 14a. Chairmen: Tetyana Pavlovska</b> |  |
| 10:50-11:02                                     | <b>Denys KLIUKOVSKYI</b><br><i>Fluoroalkylated cycloalkylamines: preparation and synthetic potentialities</i>                                      |
| 11:05-11:17                                     | <b>Andriy BULOCHNIKOV</b><br><i>Beckmann rearrangement of 3-carboxybicyclo[3.3.1]nonane and [3.2.1]octane oximes</i>                               |
| 11:20-11:32                                     | <b>Gleb KHRAPACH</b><br><i>Trifluoromethyl cyclohexadienes: One-pot synthesis via trifluoromethylation and dearomatization of activated arenes</i> |
| 11:35-11:47                                     | <b>Olga SHYYKA</b><br><i>Anticancer activity evaluation of new thienopyrimidine derivatives</i>  |
| 11:50-12:02                                     | <b>Anastasia RIABCHUNOVA</b><br><i>Conductometric study of the binary mixtures of room temperature ionic liquids with propylene carbonate</i>      |



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| 12:05-12:17  | <b>Kateryna BRETOSH</b><br><i>Chiral ferrocenyl phosphines: synthesis and using in organocatalysed asymmetric reactions</i>   |
| 12:20-12:32  | <b>Hanna OHER</b><br><i>Solvatochromic effect on electronic properties of D205 indolinic photosensitizer for dye-sensitized solar cells</i>   |
| <b>Session 14b. Chairmen: Natalia Kariaka</b>      |   |
| 10:50-11:02  | <b>Borys ZAKHARCHENKO</b><br><i>Palladium(II) complexes with pyridyl-triazole based chelates</i>  |
| 11:05-11:17  | <b>Anastasiia BATRAK</b><br><i>Interionic interactions in aqueous solutions of ionic liquids</i>  |
| 11:20-11:32  | <b>Hanna HRYSHKO</b><br><i>Study of impact factors and mechanism of gypsum binder hydration process in the presence of nanomodifiers</i>  |
| 11:35-11:47  | <b>Albina KLIMKINA</b><br><i>Spectra of the ion associates of anionic complexes with basic organic dyes</i>   |
| 11:50-12:02  | <b>Anna LAGUTA</b><br><i>Micellar effects in kinetics of alkaline fading of methyl violet</i>   |
| 12:05-12:17  | <b>Yuliia MIEKH</b><br><i>Simultaneous spectrophotometric determination of catecholamines and ascorbic acid with dawson molybdo-bismuthodiphosphate complex</i>                               |
| 12:20-12:32  | <b>Kseniia PILETSKA</b><br><i>Tricarbonyl rhenium(I) complexes with 1,2,4-triazole containing ligands</i>   |
| 12:40-13:40  | Lunch Break   |
| <b>Session 15a. Chairmen: Oleksandr Grygorenko</b> |   |
| 13:40-13:52  | <b>Serhii MELNYKOV</b><br><i>4-(trifluoromethyl)pyrimidin-2(1h)-ones in organocatalytic decarboxylative addition of malonic acid derivatives</i>  |
| 13:55-14:07  | <b>Tetyana PAVLOVSKA</b><br><i>A simple approach to the spiro[pyrrolidine-3,3'-oxindole] core based on the three-component condensation of isatins, 2-amino-4-arylimidazoles and CH-acids</i> |
| 14:10-14:22  | <b>Yurii BIBIK</b><br><i>Synthesis of coordination compounds based on 1,2,4-triazole containing analogues of Salen and Vanen</i>  |
| 14:25-14:33  | <b>Olena STEPANIUK</b><br><i>Tiadamantanes with sulfur atoms in the bridgehead positions</i>  |
| 14:35-14:43  | <b>Oleksandra SKOROBHATKO</b><br><i>Novel biocatalytic approaches for CH-functionalization of adamantane</i>  |

## Session 15b. Chairmen: Dmytro Khomenko

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| 13:40-13:52 | <b>Dmytro NOVIKOV</b><br><i>Interparticle Interactions and Dynamics in Solutions of Zinc Perchlorate in Acetonitrile 5-55°C</i>  |
| 13:55-14:07 | <b>Daria MORINA</b><br><i>Allobetulin and dehydroepiandrosterone appended bis-1,2,3-triazoles as low molecular weight gelators for easy removal heavy metal cations from water</i> |
| 14:10-14:22 | <b>Iuliia PETRENKO</b><br><i>Synthesis and crystal structure of new copper(II) complexes based on 1,2,4-triazole derivatives, containing additional donating centres</i>           |
| 14:25-14:33 | <b>Olena BORUK</b><br><i>Preventing the surface waters pollution with oil and petrochemical products</i>   |
| 14:35-14:43 | <b>Yuliia OHORODNIK</b><br><i>Synthesis of Pd(II) complexes with functionalized N-alkyl-1,2,4-triazoles</i>  |