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|  | **WEDNESDAY, 21 SEPTEMBER** |
| 13:00 – 16:00 | **Registration,** *Lobby of the Hotel Kolkhida* |
| 16:00 – 17:00 | **Welcome address,** *Hall A*  Grigor Tatishvili, Director of R. Agladze Institute of Inorganic Chemistry and Electrochemistry  Dilgam Tagiev, Institute of Chemistry Azerbaijan NAS  Giorgi Kvesitadze, Academician, President of Georgian National Academy of Sciences  Giorgi Tavadze, Academician, Georgian National Academy of Sciences |
| 17:00 – 17:30 | **Coffee break,** *Hall of the Hotel Kolkhida* |
|  | **PLENARY, *Hall A*** |
|  | Chair: **Dr.N. Vaszilcsin,** University Politehnica Timisoara, Romania |
| 17:30 – 18:00 | **V. Beschkov**, Institute of Chemical Engineering, Bulgarian Academy of Sciences, Bulgaria |
|  | BIOWASTE AND HYDROGEN SULFIDE – PERSPECTIVE RENEWABLE FUELS |
| 18:00 – 18:30 | **V. Tsitsishvili*,*** IvaneJavakhishvili Tbilisi State University, Georgia |
|  | NEW GENERATION ZEOLITIC ADSORBERS |
| 19:30 – 21:30 | **Welcome Reception,** *Café of the Hotel Kolkhida* |
|  | **THURSDAY, 22 SEPTEMBER** |
|  | **PLENARY, *Hall A*** |
|  | Chair: **Dr. V. Beshkov**, Institute of Chemical Engineering, Sofia, Bulgaria |
| 10:30 – 11:00 | **K. Dossumov*,*** Center of Physical and Chemical Methods of Research and Analysis al-Faraby KazNU, Kazakhstan |
|  | CONVERSION OF METHANE OVER THE OXIDE CATALYSTS |
| 11:00 – 11:30 | **T. Agladze*,*** Georgian Technical University, Georgia |
|  | NOVEL TECHNOLOGY PLATFORM FOR SYNTHESIS OF MULTIFUNCTIONAL HYBRID NANOCOMPOSITES |
| 11:30 – 12:00 | **N. Vaszilcsin,** University Politehnica Timisoara, Romania |
|  | ENHANCEMENT OF CATHODIC HYDROGEN EVOLUTION REACTION USING PROTON CARRIERS |
|  | **NEW METHODS FOR ECOLOGICAL AND RADIATION SAFETY, MEDICAL AND AGRARIAN RESEARCHES, *Hall A*** |
|  | Chair: **Dr. S. Kirillov**, Joint Department of Electrochemical Energy System, Kyiv, Ukraine |
|  | Co – chair: **Dr. M. Tsitsagi,** TSU Petre Melikishvili Institute of Physical and Organic Chemistry, Georgia |
| 12:15 – 12:30 | **M. Tsitsagi,** TSU Petre Melikishvili Institute of Physical and Organic Chemistry, Georgia |
|  | UTILIZATION OF AGRO-INDUSTRIAL WASTE MATERIALS BY USING SEQUENTIAL SUPERCRITICAL FLUID AND ULTRASOUND EXTRACTION METHODS |
| 12:30 – 12:45 | **S. A. Kirillov**, Joint Department of Electrochemical Energy Systems, Ukraine |
|  | PHOSPHATE SCAVENGERS FOR REMEDIATION OF GROUNDWATERS AND TREATMENT OF HYPERPHOSPHATAEMIA IN ANIMALS AND HUMANS: REVIEW AND COMPARISON |
| 12:45 – 13:00 | **T. Varazi,** Durmishidze Institute of Biochemistry and Biotechnology of Agricultural University of Georgia, Georgia |
|  | ABOUT ALGAE SPIRULINA’S ECOLOGICAL POTENTIAL FOR THEIR APPLICATION REMEDIATION TECHNOLOGIES |
| 13:00 – 13:15 | **M. Mirtskhulava**, National Center for disease control and Public health, Georgia |
|  | ULTRASOUND IN MEDICINE, BIOLOGY, BIOTECHNOLOGY |
| 13:15 – 13:30 | **D. Gventsadze**, LEPL R. Dvali Institute of Machine Mechanics, Georgia |
|  | TECHNOLOGY OF ECO-FRIENDLY HIGH TEMPERATURE HEAT-INSULATOR MATERIALS ON THE BASIS OF LIQUID GLASS AND FOAMED PERLITE |
| 13:30 – 15:00 | **Free Time** |
|  | Chair: **Dr. E. H. Ismailov**, Institute of Petrochemical Processes, Baku, Azerbaijan  Co-Chair: **Dr. V. Bakhtadze**, R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Georgia |
| 15:00 – 15:15 | **N. Kvirkvelia**, TSU R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Georgia |
|  | OZONE USE IN AGRICULTURE |
| 15:15 – 15:30 | **E. H. Ismailov**, Institute of Petrochemical Processes of Azerbaijan National Academy of Sciences, Azerbaijan |
|  | HYDROGENATION OF CARBON DIOXIDE OVER Fe-Zr/Al AND Fe-Ni/Al OXIDE CATALYSTS |
| 15:30 – 15:45 | **V. Bakhtadze**, R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Georgia |
|  | OXIDE-MANGANESE CATALYSTS FOR SOLVING OF ECOLOGICAL PROBLEMS |
| 15:45 – 16:00 | **D. Gogoli**, TSU R. Agladze Institute of Inorganic Chemistry and Electrochemistry |
|  | ELECTRODEPOSITION AND CHARACTERIZATION OF Mn-Cu-Zn ALLOYS FOR CORROSION PROTECTION COATINGS |
| 16:15 – 16:45 | **Coffee break** |
| 16:45 – 17:30 | **STUDENT SESSION, *Hall A*** |
|  | Chair: **MSc**. **M. Soselia**, IICE, Georgia |
| 16:45 – 17:00 | **K. Kharaishvili**, TSU, Georgia |
|  | SEPARATION OF ENANTIOMERS WITH SUPERFICIALLY POROUS SILICA MODIFIED WITH POLYSACCHARIDE DERIVATIVES AS EFFECTIVE CHIRAL STATIONARY PHASES IN HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY |
| 17:00 – 17:15 | **L. Khvichia,** Akaki Tsereteli State University |
|  | QUANTITATIVE DETERMINATION OF TOTAL MANGANESE IN ZESTAFONI SOIL AND DRINKING WATER AND ABNORMALITIES CAUSED BY ITS ABUNDANCE |
| 17:15 – 17:30 | **Z. Samkharadze**, R. Agladze Institute of Inorganic Chemistry and Electrochemistry |
|  | OXIDATION OF MANGANESE NITRATE SOLUTIONS BY OZONE – AIR MIXTURE |
|  | **NANO PROCESSES AND NANOTECHNOLOGIES, *Hall B*** |
|  | Chair: **Dr. G. Ya. Kolbasov**, V. I. Vernadskii Institute of General and Inorganic Chemistry of National, Academy of Sciences of Ukraine, Ukraine |
|  | Co-chair: **Dr. N. Nioradze**, TSU, IICE, Georgia |
| 12:15 – 12:30 | **O. Ruzimuradov**, Turin Polytechnic University in Tashkent, Uzbekistan |
|  | SECOND-GENERATION POROUS TiO2 BASED PHOTOCATALYTIC NANOMATERIALS: SYNTHESIS AND PROPERTIES |
| 12:30 – 12:45 | **L. Tsereteli**, Max Planck Institute of Colloids and Interfaces, Germany |
|  | AN ACCURATE COARSE-GRAINED MODEL FOR POLYSACCHARIDES IN SOLUTION |
| 12:45 – 13:00 | **M. Ersoz,** Selcuk University, Advanced Technology Research & Application Center, Turkey |
|  | NANOSTRUCTURE FABRICATION BY USING OF BLOCK COPOLYMERS |
| 13:00 – 13:15 | **V. Bregadze**, TSU, Andronikashvili Institute of Physics, Georgia |
|  | SORPTION CHARACTERISTICS OF ORGANIC MATERIALS IN METAL ION REDUCTION REACTION AND NANOTECHNOLOGY |
| 13:15 – 13:30 | **M. Rukhadze,** TSU, Faculty of Exact and Natural Sciences, Georgia |
|  | STUDY OF STRUCTURE OF CONFINED WATER NANODROPLETS |
| 13:30 – 13:45 | **G. Ya. Kolbasov**, V. I. Vernadskii Institute of General and Inorganic Chemistry of National Academy of Sciences of Ukraine, Ukraine |
|  | NANOMATERIALS AND PHOTOELECTROCHEMICAL SYSTEM FOR PRODUCTION OF SOLAR HYDROGEN |
| 13:45 – 14:00 | **N. Nioradze**, TSU, R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Georgia |
|  | SCANNING ELECTROCHEMICAL MICTROSCOPY OF NANOSTRUCTURED CARBON MATERIALS |
| 14:00 – 15:00 | **Free time** |
|  | **ENERGY SOURCES, CONVERSION AND STORAGE, *Hall B*** |
|  | Chair: **S.I. Аbasov,** Institute of Petrochemical Processes of Azerbaijan National Academy of Sciences, Azerbaijan |
|  | Co-chair: **Dr**. **G. Tsagareli,** R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Georgia |
| 15:00 – 15:15 | **E. Kachibaia**, TSU R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Georgia |
|  | SPINELS LiMXNi0.5-XMn1.5O4 – – TYPE (M=CO+CR, AL AND CU; 0<X≤0.4) AS PROMISING CATHODE MATERIALS FOR Li- ION BATTERIES |
| 15:15 – 15:30 | **S.I. Аbasov,** Institute of Petrochemical Processes of Azerbaijan National Academy of Sciences, Azerbaijan |
|  | THE FORMATION OF INTERMOLECULAR C-C BONDS AS A FUNCTION OF TEMPERATURE WITH PARTICIPATION OF С3-С4 ALKANE |
| 15:30 – 15:45 | **P. Nikoleishvili**, R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Georgia |
|  | SYNTHESIS OF TiO2 NANOTUBES BY Ti FOIL ELECTROCHEMICAL DISSOLUTION FOR DYE-SENSITIZED PHOTOELECTROCHEMICAL SOLAR CELL |
| 15:45 – 16:00 | **N. Khetsuriani,** TSU, Institute of Physical and Organic Chemistry, Georgia |
|  | PRODUCTION OF BIODIESEL USING SUPERCRITICAL FLUIDS TECHNOLOGY |
| 16:00 – 16:15 | **G. Tsagareli,** R. Agladze Institute of Inorganic Chemistry and Electrochemistry, Georgia |
|  | THE PREPARATION OF THE ACTIVE MANGANESE DIOXIDE POWDER BY ELECTROCHEMICAL METHOD FOR CURRENT SOURCES |
| 16:15 – 16:45 | **Coffee break** |
| 16:45 – 17:30 | **STUDENT SESSION, *Hall A*** |
| 17:30 – 18:30 | **POSTER SESSION, Hotel Kolkhida Lobby, next to Hall A** |
|  | **FRIDAY, 23 SEPTEMBER** |
|  | **PLENARY, *Hall A*** |
|  | Chair: **Dr. V. Tsitsishvili**, TSU, Tbilisi, Georgia |
| 9:30 – 10:00 | **G. A. Tsirlina**, Moscow State University, Russia |
|  | PLATINUM FREE ELECTROCATALYSTS BASED ON MANGANESE OXIDES FOR ELECTROCHEMICAL DEVICES |
| 10:00 – 10:30 | **S. A. Kirillov,** Joint Department of Electrochemical Energy Systems, Ukraine |
|  | HIGH-RATE LITHIUM-ION BATTERIES: RECENT ADVANCES |
| 10:30 – 11:00 | **T. Marsagishvili,** R. Agladze Institute of Inorganic chemistry and Electrochemistry, Georgia |
|  | SOME ASPECTS OF MODELING OF PHOTOCATALYSIS PROCESS |
| 11:00 – 11:30 | **Coffee break** |
|  | **NEW METHODS FOR ECOLOGICAL AND RADIATION SAFETY, MEDICAL AND AGRARIAN RESEARCHES,**  ***Hall A*** |
|  | Chair: **Dr. L. Gorniak**, Industrial Chemistry Research Institute, Warsaw, Poland |
|  | Co- chair**: Dr. M. Mantskava**, Society of Rheology, I. Beritashvili Center of Experimental Biomedicine, Georgia |
| 11:30 – 11:45 | **L. M. Gorniak,** Industrial Chemistry Research Institute, Warsaw, Poland |
|  | CHEMICAL SECURITY AS A SYNTHESIS OF SCIENCES |
| 11:45 – 12:00 | **M. Nalbandyan,** NAS RA Institute of Geological Sciences, Yerevan, Armenia |
|  | TECHNOLOGY OF PURIFICATION OF IRRIGATION WATER WITH A HIGH SALT CONTENT IN ORDER TO PREVENT SECONDARY SALINIZATION OF ARARAT VALLEY |
| 12:00 – 12:15 | **Ch. Stahl**, NaralexMaschinen UG, Germany |
|  | BIO BRIQUETTES POTENTIAL IN GERMANY |
| 12:15 – 12:30 | **A. Mskhiladze**, TSU, Georgia |
|  | ENANTIOSEPARATION OF CHIRAL ANTIMYCOTIC DRUGS IN HIGH-PERFOR­MANCE LIQUID CHRO­MA­TOGRAPHY WITH POLYSAC­CHARIDE-BASED CHIRAL COLUMNS |
| 12:30 – 12:45 | **M. Mantskava**, Society of Rheology, I. Beritashvili Center of Experimental Biomedicine, Georgia |
|  | THE SIGNIFICANCE OF THE NEW PROPERTIES OF BEMIPARIN FOR APPLIED MEDICINE |
| 12:45 – 13:00 | **A. Mskhiladze,** Faculty of Natural Sciences and Healthcare, Sokhumi State University, Georgia |
|  | SOME CHARACTERISTICS OF THE SEPARATION OF ENANTIOMERS OF BETA-BLOKER DRUGS USING POLYSACCHARIDE BASED CHIRAL COLUMNS IN HPLC |
|  | **FUNDAMENTAL AND TECHNOLOGICAL ASPECTS OF PROCESSING OF MINERAL PRODUCT AND SECONDARY RAW MATERIALS*, Hall B*** |
|  | Chair: **Dr. G. Magalashvili**, GTU, Tbilisi, Georgia |
|  | Co- chair: **Dr. T. Machaladze,** TSU, R. Agladze Institute of Inorganic Chemistry and Electrochemistry |
| 11:30 – 11:45 | **L. Gurchumelia**, TSU, R. Agladze Institute of Inorganic Chemistry and Electrochemistry |
|  | ELABORATION OF NEW TYPES, ECO-SAFE, INEXPENSIVE, HIGHLY EFFICIENT FIRE- PROTECTIVE MATERIALS |
| 11:45 – 12:00 | **G. Zakharov,** Ferdinand Tavadze Institute of Metallurgy and Materials Science |
|  | OBTAINING LIGATURES FROM FINE GRAINED PARTICLES OF MANGANESE WASTE BY TECHNOLOGY -SHS METALLURGY |
| 12:00 – 12:15 | **L.G. Shamanauri**, R. Dvali Institute of Machine Mechanics |
|  | COMPOSITES BASED ON POLYESTER LACQUER AND MINERAL FILLERS |
| 12:15 – 12:30 | **G. Magalashvili,** Georgian Technical University |
|  | ASCERTAINMENT OF THE MECHANISM OF FORMING OF ZONAL CONCENTRIC “AGATE STRUCTURES” |
| 12:30 – 12:45 | **B. Godibadze**, LEPL, G. Tsulukidze Mining Institute, Georgia |
|  | EXPLOSIVE CONSOLIDATION OF Cu–W COMPOSITES IN HOT CONDITION |
| 12:45 – 13:00 | **A. Peikrishvili**, F. Tavadze Institute of Metallurgy and Materials Science, IICE, Georgia |
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|  | SHOCK WAVE ASSISTED CHEMICAL REACTIONS AND CONSOLIDATION OF Ta-Al INTERMETALIC COMPOUNDS |
| 13:00 – 13:15 | **L. Gabunia**, Caucasian Alexander Tvalchrelidze Institute of Mineral Resources, Georgia |
|  | RESEARCH OF THE POSSIBILITY OF RECEIVING ACID AND HEAT-RESISTANT CONTINUOUS FIBER GLASS WITH USE OF MANGANIFEROUS WASTE PRODUCTS |
| 13:15 – 13:30 | **T. Machaladze,** TSU, R. Agladze Institute of Inorganic Chemistry and Electrochemistry |
|  | THERMAL CHARACTERISTICS OF SPINEL-TYPE COMPLEX OXIDES Me1-XZnXFe2O4 (WITH Me= Cu OR Mg) |
| 13:30 – 13:45 | **E. Shapakidze**, TSU, Caucasian A. TvalchrelidzeInstitite of Mineral Resources, Georgia |
|  | RESEARCH OF INFLUENCE OF THE MODIFYING BaO AND SO3 OXIDES ON PROPERTIES OF CEMENT CLINKER |
| 13:45 – 15:00 | **Free time** |
| 15:00 – 16:00 | **POSTER SESSION, *Hotel Kolkhida Lobby*** |
| 16:00 – 16:30 | **Coffee break** |
|  | **ROUND TABLE**; ***Hall A*** |
| 16:30 – 16:45 | **L. Chobanyan**, Georgian Technical University, Institute *TECHINFORMI* |
|  | ANALYSIS OF SCIENTIFIC PRODUCTIVITY AT THE MESO- AND MACRO-LEVELS |
| 16:45 – 17:15 | **M. Kutsia,** National Intellectual Property Center of Georgia – Sakpatenti |
|  | PATENTING IN CHEMISTRY |
| 17:15 – 17:30 | **Discussion** |
| 17:30 – 18:30 | **CLOSING THE CONFERENCE, *Hall A*** |