

National Institute for Research-Development
in Chemistry and Petrochemistry - ICECHIM



The International Symposium

“PRIORITIES OF CHEMISTRY
FOR A SUSTAINABLE
DEVELOPMENT”
PRIOCHEM - XXI

Splaiul Independenței 202, sect. 6, Bucharest



Event organized under the aegis and with the support of the Romanian

Ministry of Education and Research

and

National Authority for Research



MINISTERUL EDUCAȚIEI ȘI CERCETĂRII

Partners:



Romanian Chemical Society



**Foundation "C. D.
NENITESCU"**



Media partner



Event held under the patronage of
The Academy of Romanian Scientists



Sponsors:



PHANOS

Symposium program

Wednesday October 15th 2025

09 ⁰⁰ - 10 ⁰⁰	Registration of participants – 3 rd floor lobby
10 ⁰⁰	Symposium opening ceremony – Room 1 (3rd floor)

PLENARY SESSION

Chairperson: Mihaela DONI

Room 1, 3rd floor

No.	Starting time	Presenter	Title
PS-1	10 ³⁰	Fabiana ARDUINI	PAPER-BASED ELECTROCHEMICAL (BIO)SENSORS AS SUSTAINABLE ANALYTICAL TOOLS
11 ⁰⁰ -11 ¹⁵ – Break			

SECTIONS PRESENTATIONS

Chairpersons: Tanța Verona IORDACHE, Andrei SÂRBU

11¹⁵-12⁴⁰

No.	Authors	Title
PO-01	Barkat Ali KHAN, Awais KAREEM	POLYMERIC BIOMATERIAL BASED THIOLCHITOSIDE & FOLIC ACID LOADED NANOCOMPOSITE: IN-VITRO AND IN-VIVO ASSESSMENTS
PO-02	Aleksandra LUSINA, Michał CEGŁOWSKI	FAPA-MS ENHANCED BY MOLECULARLY IMPRINTED POLYMERS FOR TARGETED ENVIRONMENTAL ANALYSIS

PO-03	Lucia PINTILIE , Maria MAGANU, Constantin DRAGHICI, Miron Teodor CAPROIU, Mădălina-Diana GABOREANU, Ioana-Cristina MARINAS	THE DESIGN AND DEVELOPMENT OF SOME FLUOROQUINOLONES WITH ACTIVITY AGAINST MULTIDRUG RESISTANT MICROORGANISMS
PO-04	Rakhymzhan KOSSANOV , Yessengali GILAZHOV, Amanzhan SAGINAEV, Amangeldi ABILKHAIROV	A COMPUTATIONAL STUDY OF THE EFFECTIVENESS OF TERT-AMYL METHYL ETHER AND ETHYNYLCYCLOPENTANOL AS OCTANE-BOOSTING ADDITIVES IN GASOLINE
PO-05	Miruna-Ioana SAVA , Mihaela DEACONU, Cristian MATEI, Daniela BERGER	ULVA LACTUCA – A SOURCE OF POLYSACCHARIDES FOR GOLD NANOPARTICLES SYNTHESIS
PO-06	Alin Gabriel GHEORGHE , Mihaela DEACONU, Ana-Maria BREZOIU, Ana-Maria SECIU, Bogdan TRICĂ, Cristian MATEI, Daniela BERGER	PROPERTIES OF BIOCOMPOSITE MATERIALS CONTAINING Ag or Au NANOPARTICLES
PO-07	Livia-Teodora CIOBANU , Diana CONSTANTINESCU-ARUXANDEI, Florin OANCEA, Ileana Cornelia FARCASANU	YEAST SURFACE DISPLAY OF FUNGAL CYSTEINE-RICH PROTEINS FOR BIOGENIC SELENIUM NANOPARTICLES PRODUCTION

12⁴⁰-14⁰⁰ - Break

PLENARY SESSION

Chairperson: Radu Claudiu FIERĂSCU

Room 1, 3rd floor

No.	Starting time	Presenter	Title
PS-2	14 ⁰⁰	Alvina AVAGYAN , Radu Claudiu FIERASCU, Laura TADEVOSYAN, Gayane MARTIROSYAN	EARLY STEPS AND EMERGING RESULTS IN THE INTRODUCTION OF MULTIFUNCTIONAL PLANT VARIETIES IN ARMENIA
PS-3	14 ³⁰	Martin KILO	GLASS DOSIMETERS FOR MONITORING THE CLIMATE IN CULTURAL HERITAGE.

15⁰⁰-15¹⁰ – Break

SECTION PRESENTATIONS

Chairpersons: Mihaela DONI, Florin OANCEA

15¹⁰-16⁰⁰

No.	Authors	Title
PO-08	Andreea Luiza MIRT , Esin TUNCEL, Gabriel VASILIEVICI, Anton FICAI, Aldo R. BOCCACCINI	SYNTHESIS OF DENDRITIC BIOACTIVE GLASS NANOPARTICLES AND THEIR APPLICATION IN 3D-PRINTED HYDROGELS FOR BONE TISSUE ENGINEERING
PO-09	Olena ARTIUSHENKO , Aldair VERGEL RANGEL, Volodymyr ZAITSEV	PURIFICATION STRATEGIES FOR BIOCOMPATIBLE N,P-DOPED CARBON DOTS: FROM SYNTHESIS TO SAFE MEDICAL USE
PO-10	Aminu Bayawa MUHAMMAD , Aliyu Muhammad SOKOTO, Nura Bala MANGA, Suleiman Abubakar ZAURO	THERMO-CATALYTIC VALORIZATION OF WASTE PLASTICS INTO FUELS OVER BIMETALLIC NICKEL AND COBALT OXIDES ON ALUMINA
PO-11	Anca Andreea ZOE, Nicoleta MORARU, Cătălina Cristina TEODORESCU (STANICA), Anca-Daniela RAICIU	PHARMACOGNOSTIC ASPECTS AND PHYTOTHERAPEUTIC APPLICATIONS OF MATRICARIA CHAMOMILLA, MELISSA OFFICINALIS AND HYPERICUM PERFORATUM

POSTER SESSION

Chairpersons: Adriana FRONE, Ana Maria GURBAN, Radu Claudiu FIERĂSCU

Ground floor lobby

16¹⁰-17³⁰

No.	Authors	Title	Monitor
PP-1.	Temenuzhka RADOYKOVA, Stela GEORGIEVA	ENHANCING THE THERMAL STABILITY OF THERMOPLASTICS USING NATURAL PHENOLIC ANTIOXIDANTS	1
PP-2.	Laura Mihaela STEFAN, Ana-Maria SECIU-GRAMA, Andreea IOSAGEANU, Alexandra GASPAR-PINTILIESCU, Viorica COROIU, Oana CRACIUNESCU	INTERACTION OF MULTIFUNCTIONAL POLYMERIC COMPOSITES BASED ON JELLYFISH POLYPEPTIDES, ALOE POLYPHENOLS AND SODIUM ALGINATE WITH SKIN CELLS	1
PP-3.	Abdulov ALMIR, Kenzhebai ADILBEK, Beisenbekova GULZIYA	BOSEAN: PURIFICATION OF WATER BODIES FROM OIL POLLUTION	1
PP-4.	Claudia Valentina POPA, Razvan NEAGU, Lucia-Elena IONESCU, Radu-Iulian TANASA, Diana-Mihaela	THE ANTIBACTERIAL AND ANTIVIRAL ACTIVITIES OF AN HYDROGEL FUNCTIONALIZED WITH A 2-NAPHTHYL-DIHYDROPYRIMIDINE DERIVATE	1

	POPESCU, Cristina-Anca SECARA, Maria MARINESCU		
PP-5.	Maria MARINESCU, Christina ZALARU, Alexandru-Cosmin BĂLOI, Ioan Cristian MIHALACHE, Claudia Valentina POPA	SYNTHESIS, CHARACTERIZATION, ADME AND DFT STUDIES OF SOME PYRIMIDINE COMPOUNDS	1
PP-6.	Florin Aurel DINCA, Alexandra Gabriela STANCU, Maria RAPA	MICROPLASTIC GENERATION FROM ARTIFICIAL TURFS - A REVIEW	1
PP-7.	Ramona-Eugenia POPESCU, Maria RAPA	PROCESSING METHODS FOR THE VALORIZATION OF SPENT COFFEE GROUNDS – A REVIEW	1
PP-8.	Ramona-Daniela PAVALOIU, Corina BUBUEANU, Diana-Ioana CRISTEA, Teodor Mihai FLORESCU, Fawzia SHA'AT	DEVELOPMENT OF TOPICAL FORMULATION CONTAINING LIPOSOMES LOADED WITH ECHINACEA PURPUREA: PHYSICOCHEMICAL PROPERTIES AND POLYPHENOL RELEASE DYNAMICS	2
PP-9.	Fawzia SHA'AT, Ramona-Daniela PAVALOIU	DEVELOPMENT AND CHARACTERIZATION OF SENOTHERAPEUTIC-LOADED POSOMES AS AN ANTI-AGEING NANOCARRIER	2
PP-10.	Madina MALIK-SHAPAGAT, Beisenbekova GULZIYA	A MINI-TESTER FOR THE DETERMINATION OF PROCESSES IN FOOD PRODUCTS	2
PP-11.	Talap AIYMNUR, Samat MADINA	ECO-FRIENDLY BANANA PEEL INSOLES	2
PP-12.	Khadisha MENDIGALIYEVA	SO ₂ LUTION: AN INNOVATIVE PORTABLE DEVICE FOR AIR PURIFICATION THROUGH CALCIUM HYDROXIDE-BASED NEUTRALIZATION	2
PP-13.	Lucian-Gabriel ZAMFIR, Cătălina GIFU, Saniye SOYLEMEZ, Dilek SOYLER, Petru EPURE, Iuliana RAUT, Mariana CONSTANTIN, Cristina FIRINCA, Maria-Luiza JECU, Mihaela DONI, Ana-Maria GURBAN	BIOSENSING PLATFORMS WITH ADVANCED NANOCOMPOSITES FOR NON-INVASIVE MONITORING OF BIOMARKERS IN BIOLOGICAL FLUIDS	2
PP-14.	Georgeta TEODORESCU (DIACONESCU), Daniela Simina STEFAN, Alexia CROITORU	STUDY OF THE INFLUENCE OF AQUEOUS MEDIA ON THE CHARACTERISTICS OF PLASTIC PACKAGING	2
PP-15.	Marinela Victoria IORDĂESCU (DUMITRU), Tanța Verona IORDACHE, Ioana Cătălina GÎFU, Ana Mihaela GAVRILĂ, Anita Laura CHIRIAC, Anamaria ZAHARIA, Andrei SÂRBU, Sorin Viorel DOLANA, Iulia Elena NEBLEA, Teodor SANDU	POLYMER MEMBRANES MODIFIED WITH SILANOL MOIETIES	2
PP-16.	Elena Bianca STOICA, Anita Laura CHIRIAC, Anamaria ZAHARIA, Sorin Viorel DOLANA, Nicolae STĂNICĂ, Tanța Verona IORDACHE, Andrei	POLYMER COMPOSITES ENDOWED WITH MAGNETIC FEATURES	2

PP-17.	Nuriya AMANGELDI	INNOVATIVE TECHNOLOGIES FOR SCALABLE FABRICATION OF GRAPHENE: A MULTIFUNCTIONAL MATERIAL FOR ENVIRONMENTAL PROTECTION	3
PP-18.	Aygun RUSTAMOVA, Yegana HAMZAYEVA, Shahin ORUDJEV, Raksana AGAYEVA, Firuza PASHAYEVA, Rovshan MURADKHANOV, Etibar ISMAILOV	ALUMINA-BASED Ni-Fe CATALYST FOR CARBON DIOXIDE REFORMING: STRUCTURAL AND THERMODYNAMIC FEATURES, CATALYTIC PERFORMANCE	3
PP-19.	Sevinj OSMANOVA, Aytakin ASGAROVA, Zulfiiyya MAMMADOVA, Tamilla ABBASOVA, Aygun RUSTAMOVA, Shahla TAGIYEVA	ALUMINA BASED NICKEL-IRON CATALYST FOR METHANE PYROLYSIS. SYNTHESIS AND STRUCTURAL PECULIARITIES	3
PP-20.	Adelaida-Sorana TRIFU, Iulia-Gabriela DAVID	VOLTAMMETRIC DETERMINATION OF DIAZEPAM	3
PP-21.	Violeta-Carolina NICULESCU, Ramona Raluca HANDOLESCU, Nadia PAUN, Claudia SANDRU, Sina Niculina COSMULESCU	Fe-MODIFIED BIOCHAR: FROM AGRICULTURAL WASTE TO CATALYTIC MATERIAL	3
PP-22.	Andreea IONIȚĂ, George Mihail TEODORESCU, Gabriela Mădălina OPRICĂ, Cătălina Diana UȘURELU, Gabriel VASILIEVICI, Zina VULUGA	MORPHOLOGY AND TEXTURAL PROPERTIES OF CATION EXCHANGED CLINOPTILOLITE	3
PP-23.	Monica Florentina RADULY, Valentin RADITOIU, Alina RADITOIU, Cristian-Andi NICOLAE	SILANE-FUNCTIONALIZED SERICITE AS A HYBRID SUPPORT FOR THE IMMOBILIZATION OF BIOACTIVE COMPOUNDS FROM RED CLOVER	3
PP-24.	Andreea MOLDOVAN, Aurel DIACON, Gabriela TOADER, Martino ALDRIGO, Sergiu IORDĂNESCU, Alexandra MOCANU, Oana BRINCOVEANU, Cosmin ROMANITAN, Traian ROTARIU, Edina RUSEN, Ana Mihaela GAVRILA, Bodan TRICA, Alexandru MARIN	SEMI-INTERPENETRATED POLYMER NETWORK HYDROGELS WITH MO-MXENES FOR TUNABLE ELECTROMAGNETIC INTERFERENCE SHIELDING	3
PP-25.	Gabriela TOADER, Aurel DIACON, Alexandra MOCANU, Livia A. DINU, Pericle VARASTEANU, Oana BRINCOVEANU, Cosmin ROMANITAN, Mioara ALEXANDRU, Florina L. ZORILA, Celina DAMIAN, Edina RUSEN, Raul A. MITRAN	MXENE-POLYMER NANOCOMPOSITES AS VERSATILE PLATFORMS FOR ADVANCED FUNCTIONAL MATERIALS	3
PP-26.	Cătălina ȘTEFAN, Raluca ȘUICĂ-BUNGHEZ, Mihaela GANCIAROV,	EVALUATION OF PHYTOCHEMICAL COMPOUNDS AND ANTIOXIDANT ACTIVITY OF ALOE ARBORESCENS	3

Raluca SENIN, Luiza CAPRA, Georgeta IVAN, Rusăndica STOICA			
PP-27.	Georgeta-Ramona IVAN, Luiza CAPRA, Mihaela GANCIAROV, Rusandica STOICA	VALIDATION OF THE METHOD FOR DETERMINATION OF ZINC, ALUMINUM AND TITANIUM IN POLYOLEFINS PACKAGING BY ICP-OES	3
PP-28.	Maria Aqeel KHAN, Marium ISHTIAQ	DIAZABICYCLO[2.2.2]OCTANE-DERIVED IONIC LIQUID AS A SUSTAINABLE CATALYST FOR THE SYNTHESIS OF HETEROCYCLES AND THEIR BIOLOGICAL POTENTIAL AS BETA-LACTAMASE INHIBITORS	3

Thursday October 16th 2025

PLEANRY & INVITED LECTURES

Chairpersons: Mihaela DONI, Radu Claudiu FIERĂSCU

Room 1, 3rd floor

No.	Starting time	Presenter	Title
PS-4	10 ⁰⁰	Dan-Adrian VASILE, Gabriela PETRISOR, Rucsandra DUMITRESCU, Ludmila MOTELICA. Natalia DRAGUT, Angela SPOIALA, Roxana TRUSCA, Ovidiu OPREA, Dan MIHAIESCU, Coralia BLEOTU, Denisa FICAI, Anton FICAI	MESOPOROUS SILICA: AN EMERGING ACTIVE MATERIAL FOR FUTURE APPLICATIONS!
IL-1	10 ³⁰	Mădălina - Elena ARGĂSEALĂ	EUROPEAN FUNDING OPPORTUNITIES IN THE BIOECONOMY AND BEYOND: INSIGHTS AND SUCCESS STORIES

11⁰⁰-11²⁰ - Coffee break

SECTION PRESENTATIONS

Chairpersons: Florin OANCEA, Gabriel VASILIEVICI

11²⁰-13⁰⁰

No.	Authors	Title
PO-12	Adina SAILAU , Aibibi MAUITOVA, Abbas Syed ASIF	AI-OPTIMIZED ALGAE CULTIVATION FOR SUSTAINABLE BIODIESEL PRODUCTION
PO-13	Ramina DOSZHAN , Akbota YERSULTAN	COMPARATIVE STUDY OF BANANA AND ORANGE PEEL-DERIVED BIO-CHAR FOR EFFICIENT WATER PURIFICATION
PO-14	Salihu Abdullahi KIYAWA , Musa Muhammed IBRAHIM, Mohammed MU'AZU	ESTIMATION AND HEALTH RISK ASSESSMENT OF POLYCYCLIC AROMATIC HYDROCARBONS IN LOCALLY-ROASTED MEATS MARKETED IN ZARIA, NIGERIA

PO-15	Hatem A.F.M. HASSAN, Nada K. SEDKY, Mohamed S. NAFIE, Noha Khalil MAHDY, Iten M. FAWZY, Toka Waleed FAYED, Eduard PREIS, Udo BAKOWSKY, Sherif Ashraf FAHMY	ECO-ENGINEERED ZINC OXIDE NANOCARRIERS: A GREEN MICROWAVE-NATURAL PRODUCT STRATEGY FOR SUSTAINABLE PLATINUM-BASED CANCER THERAPY
PO-16	Yerkebulan ZHASULANULY	MULTIFUNCTIONAL EGGSHELL WASTE BEADS
PO-17	Elina KAIRATOVA, Asif Abbas Syed	ECO-FRIENDLY DISHWASHING LIQUID FROM ORANGE AND BANANA PEELS: A SUSTAINABLE SOLUTION TO CHEMICAL POLLUTION
PO-18	Didarkyzy BALNUR, Amirzhan Madina BEYBITKYZY, Beisenbekova GULZIYA	ALFAPURE: A BIOFILTER BASED ON FOOD WASTE AND ALFALFA FOR THE REMOVAL OF HEAVY METALS AND PETROLEUM PRODUCTS FROM WATER BODIES
PO-19	Grigore PȘENOVSCI, Ioan CĂLINESCU, Ciprian-Gabriel CHISEGA-NEGRILĂ	SUSTAINABLE HYDROGEN PRODUCTION FROM END-OF-LIFE VEHICLE PLASTICS USING MICROWAVE-ASSISTED PYROLYSIS

13⁰⁰-14⁰⁰ –Break

Tech Talks – Meet the mentors!

Technology Transfer – Challenges and Opportunities

Room 1, 3rd floor

14⁰⁰-15⁰⁰

Moderator: Radu Claudiu FIERĂSCU

Participants/institutions
EPI SISTEM S.R.L.
HOFIGAL EXPORT-IMPORT S.A.
S.C. KEMATRONIC S.R.L.
NEW GREEN PROTOCOL S.R.L.
VIMANDO BUSINESS CONSULTING & DEVELOPMENT S.R.L.

PLENARY SESSION & AUTHOR TRAINING

Chairpersons: Ana Mihaela GAVRILĂ, Radu Claudiu FIERĂSCU

Room 1, 3rd floor

15⁰⁰-16³⁰

No.	Starting time	Presenter	Title
PS-5	15 ⁰⁰	Ridha DJELLABI	SOLAR SUPERHEATED STEAM FOR STERILIZATION AND H ₂ GENERATION
SP-1	15 ³⁰	Emily YOUNG (<i>Journal Manager Frontiers in Materials</i>):	TIPS AND TRICKS AND IMPORTANCE OF OPEN-ACCESS PUBLISHING
PS-6	16 ⁰⁰	Qais M. AL-BATAINEH, Ahmad Ali H. OMARI, Ahmad MIGDADI	ELECTROCHEMICAL PERFORMANCE OF Er-DOPED TITANIA FILM FOR ENERGY STORAGE APPLICATIONS

16³⁰-18⁰⁰ Poster presentation (Ground floor lobby)

Chairpersons: Adriana FRONE, Ana Maria GURBAN, Radu Claudiu FIERĂSCU

No.	Authors	Title	Monitor
PP-29.	Aizere ANDOSSOVA, Asif Abbas SYED	PARA-OLEUM FLUID (POF): A NOVEL MAGNETIC NANOTECHNOLOGY FOR INCREASED OIL RECOVERY FROM CONTAMINATED SOIL AND OIL SPILL INCIDENTS	1
PP-30.	Ansagan KABDELOVA	THE WATER FILTER "ANSAQUA"	1
PP-31.	Ayaulim AMANGOSQZY, Rakhymzhan KOSSANOV, Asif Abbas SYED	EVALUATION OF PEGANUM HARMALA EXTRACT AS A NATURAL SHAMPOO INGREDIENT	1
PP-32.	Toma FISTOS, Madalin Vasile COMAN, Denisa FICAI, Irina FIERASCU, Ionel Claudiu BADEA, Andrei Dragos MARCU, Irina Elena CHICAN, Cristian-Andi NICOLAE, Ludmila MOTELICA, Roxana Doina TRUSCA, Ovidiu Cristian OPREA, Anton FICAI, Radu Claudiu FIERASCU	SUSTAINABLE PROTECTION OF ARCHITECTURAL HERITAGE THROUGH SILANE-NANOPARTICLE HYBRID TREATMENTS	1

PP-33.	Roxana Ioana MATEI, Irina FIERASCU, Anda Maria BAROI, Toma FISTOS, Ioana Silvia HOSU, Irina Elena CHICAN, Cristina Emanuela ENASCUTA, Luiza CAPRA, Georgeta Ramona IVAN, Rodica Mihaela FRINCU, Sorin Marius AVRAMESCU, Radu Claudiu FIERASCU	EFFICIENT CADMIUM RETENTION FROM POLLUTED WATER USING NOVEL ADSORBENT MATERIALS	1
PP-34.	Irina FIERASCU, Adriana MOANTA, Anda Maria BAROI, Roxana Ioana MATEI, Toma FISTOS, Ioana Silvia HOSU, Irina Elena CHICAN, Cristina ENASCUTA, Radu Claudiu FIERASCU	“GREEN SOLUTIONS” FOR CULTURAL HERITAGE PROTECTION: A SUSTAINABLE APPROACH THROUGH INTERDISCIPLINARY INNOVATION	1
PP-35.	Cristina Emanuela ENASCUTA, Manuel DRUGULESCU, Elena-Emilia SIRBU, Irina FIERASCU, Diana PASARIN, Raluca SENIN, Ioana Raluca SUICA-BUNGHEZ, Grigore PSENOVSCHI, Radu Claudiu FIERASCU, Vasile LAVRIC	ADVANCED ULTRASOUND-ASSISTED EXTRACTION OF BIOACTIVE COMPOUNDS FROM BEE PRODUCTS	1
PP-36.	Anda Maria BAROI, Daniela IONESCU, Irina FIERASCU, Cristina Emanuela ENASCUTA, Justinian-Andrei TOMESCU, Stefan BUHAEV, Cristina Mihaela LUNTRARU, Roxana Ioana MATEI, Toma FISTOS, Ioana Silvia HOSU, Irina Elena CHICAN, Radu Claudiu FIERASCU	FROM WASTE TO PROTECTION: CIRCULAR STRATEGIES FOR SUSTAINABLE MAP CULTIVATION	1
PP-37.	Anda Maria BAROI, Irina Elena CHICAN, Daniela IONESCU, Alina Ruxandra Eugenia ORȚAN, Radu Claudiu FIERĂSCU, Justinian – Andrei TOMESCU, Carmen Laura CÎMPEANU	CLEAN & GREEN: INNOVATIVE SOLUTIONS FOR FRESH PRODUCE IN A SUSTAINABLE FOOD CHAIN	1
PP-38.	Alexandra MANEA, Andrei Theodor BELEA, Alina ORTAN, Irina Elena CHICAN, Daniela IONESCU, Mihaela AVRAM, Cristina Mihaela LUNTRARU, Justinian-Andrei TOMESCU	COMPARATIVE ANTIMICROBIAL EFFICACY OF KOMBUCHA-DERIVED VINEGAR AND CONVENTIONAL VINEGAR SOLUTIONS FOR REDUCING POST-HARVEST MICROBIAL CONTAMINATION ON FRESH MARKET APPLES: AN ECO-FRIENDLY DECONTAMINATION APPROACH	1
PP-39.	Andrei Ionut COCA, Paula CISMARU, Mircea COMAN, Martin MONDEK, Anda-Maria BAROI, Roxana Ioana MATEI (BRAZDIȘ), Toma FISTOȘ, Irina CHICAN, Irina FIERĂSCU, Radu-Claudiu FIERĂSCU, Ioana Silvia HOSU	COMPUTATIONAL DENSITY-FUNCTIONAL THEORY (DFT) OF REACTIVE OXYGEN SPECIES (ROS) AND INTERFERING SPECIES - COMPARISON WITH EXPERIMENTAL VIBRATIONAL SPECTROSCOPY	1
PP-40.	Amanat CHAPAY	WASTE-TO-ENERGY: THE POTENTIAL OF RDF FUEL AND ITS APPLICATION IN WASTE RECYCLING	2

PP-41.	Nurym NURTAS	DEVELOPMENT OF ELECTROSTATIC FILTERS FOR REDUCING SULFUR EMISSIONS AT THE ATYRAU OIL REFINERY	2
PP-42.	Elnaz SMADYAROVA, Aruzhan GARIFULLA, Beisenbekova GULZIYA, Kurmashev ERBOLAT	ECO-FRIENDLY STARCH PRODUCTION	2
PP-43.	Alexandra GASPAR-PINTILIESCU, Ana-Maria SECIU-GRAMA, Andreea IOSAGEANU, Ana-Maria PRELIPCEAN, Justinian TOMESCU, Viorica COROIU, Oana CRACIUNESCU	WORMWOOD HYDROLATE UP-REGULATED VEGF SYNTHESIS AND PROTECTED MOUSE ENDOTHELIAL CELLS AGAINST LIPOPOLYSACCHARIDE-INDUCED OXIDATIVE DAMAGE	2
PP-44.	Elena MIHAI, Alexandra GASPAR-PINTILIESCU, Bogdan NEGREANU-PIRJOL, Rodica TATIA, Ticuta NEGREANU-PIRJOL, Oana CRACIUNESCU	ANTIOXIDANT PEPTIDES FROM RHIZOSTOMA PULMO JELLYFISH FOR BIOMEDICAL APPLICATIONS	2
PP-45.	Roxana-Mădălina STOICA, Nicoleta ENE	EVALUATION OF THE ANTIMICROBIAL POTENTIAL OF BIOSURFACTANT PRODUCED BY <i>PSEUDOMONAS PUTIDA</i> STRAIN	2
PP-46.	Diana PASARIN, Catalin BILBIE, Luciana PALADA-PARASCHIV, Cristina Emanuela ENASCUTA, Catalin Bogdan MATEI, Andra-Ionela GHIZDAREANU	APPLICATIONS OF LIPOSOMES IN THE FOOD INDUSTRY	2
PP-47.	Florina LUNGU (IONITA), Simina Daniela STEFAN, Alexandra GROSU	STUDY OF IBUPROFEN RETENTION ON VARIOUS ADSORBENTS	2
PP-48.	Alexandrina RUGINĂ, Gabriel Lucian RADU, Mihaela Marinela PĂUN, Cătălin IORDĂCHEL, Andreia ALECU, Elena BERTEANU, Ionică Mihaela ENACHE	BIOPOLYMERIC MEMBRANE BASED ON COLLAGEN AND RETINOL FOR HYDRATION AND REGENERATION OF THE SKIN	2
PP-49.	Denisa FICAI, Ludmila MOTELICA, Roxana Doina TRUSCA, Irina FIERASCU, Madalin Vasile COMAN, Radu Claudiu FIERASCU, Ovidiu Cristian OPREA, Anton FICAI, Ecaterina ANDRONESCU	DEVELOPMENT OF ANTIMICROBIAL CLAYS AS ADDITIVES FOR SPECIAL MATERIALS WITH POTENTIAL USE IN CULTURAL HERITAGE	2
PP-50.	Alina ORTAN, Simona MARCU SPINU, Mihaela DRAGOI CUDALBEANU, Daniela IONESCU, Justinian-Andrei TOMESCU, Carmen CIMPEANU	DEVELOPMENT OF BIOACTIVE EDIBLE COATINGS FOR EXTENDED SHELF-LIFE OF FRUITS	2
PP-51.	Medina DAUT, Asif Abbas SYED	A GREEN APPROACH TO ZNO DYE-SENSITIZED SOLAR CELLS: FABRICATION WITH NATURAL EXTRACTS	3
PP-52.	Iuliana RĂUT, Lucian-Gabriel ZAMFIR, Cristina FIRINCĂ, Mariana	EXPLORING MICROBIAL STRATEGIES FOR PHENOL BIODEGRADATION IN CONTAMINATED ENVIRONMENTS	3

CONSTANTIN, Luiza JECU, Ana-Maria GURBAN			
PP-53.	Maria-Cristina RADULESCU, Madalina-Petruta BUCUR, Bogdan BUCUR, Simona Carmen LITESCU FILIPESCU, Lucian Gabriel RADU	DIAZONIUM SALTS ELECTROCHEMICAL SENSOR FOR HEAVY METALS DETECTION IN TOMATO SAMPLES	3
PP-54.	Cristina FIRINCĂ, Lucian-Gabriel ZAMFIR, Iuliana RĂUT, Mariana CONSTANTIN, Radu FIERĂSCU, Luiza Capră, Mihaela DONI, Luiza JECU, Ana-Maria GURBAN, Tatiana ȘESAN	SYNERGISTIC FUNGAL-PLANT SYSTEMS INTEGRATED WITH ELECTROCHEMICAL MONITORING FOR SUSTAINABLE HEAVY METAL REMEDIATION IN SOIL	3
PP-55.	Nicoleta RADU, Mihaela BOTEAN, Mariana CALIN, Iuliana RAUT	CAN THE MICROORGANISMS USED IN SUSTAINABLE AGRICULTURE ENSURE THE BIOREMEDIATION OF HEAVY METAL EFFLUENTS?	3
PP-56.	Ecaterina-Andreea CONSTANTIN, Camelia DIGUȚĂ, Florentina MATEI, Diana CONSTANTINESC-ARUXANDEI, Florin OANCEA	CHARACTERIZATION OF MICROBIAL INTERACTIONS IN THE SPONTANEOUS FERMENTATION OF A TRADITIONAL ROMANIAN PRODUCT, BORS	3
PP-57.	Naomi TRITEAN, Ioana POPA-TUDOR, Ștefan-Ovidiu DIMA, Bogdan TRICĂ, Marius GHIUREA, Anisoara CIMPEAN, Florin OANCEA, Diana CONSTANTINESCU-ARUXANDEI	MUCOADHESIVE HYDROGELS BASED ON BACTERIAL CELLULOSE FROM KOMBUCHA FERMENTATION AND VEGETAL CELLULOSE FROM BREWER'S SPENT GRAINS	3
PP-58.	Daria Gabriela POPA, Oana Andreea CHEOAFĂ, Diana CONSTANTINESCU-ARUXANDEI, Florin OANCEA	ENHANCED GROWTH OF CHORELLA SOROKINIANA BY LIGNOSULFONATE SUPPLEMENTATION	3
PP-59.	Maria-Antonia TĂNASE, Ștefan-Ovidiu DIMA, Mălina DESLIU-AVRAM, Mihaela GANCIAROV, Cristian Andi NICOLAE, Bogdan TRICĂ, Victor FARAON, Diana CONSTANTINESCU-ARUXANDEI, Florin OANCEA	ORGANOSOLV EXTRACTION OF LIGNIN FROM SAWDUST AND SPENT MUSHROOM SUBSTRAT	3
PP-60.	Luminita DIMITRIU, Diana CONSTANTINESCU-ARUXANDEI, Daniel PREDA, Cristian-Andi NICOLAE, Mihaela GANCIAROV, Marius GHIUREA, Florin OANCEA	HYDROGEN-BONDING NETWORKS IN NATURAL DEEP EUTECTIC SYSTEMS MODULATE THE FUNCTIONAL BEHAVIOR OF POLYPHENOLS	3

Friday October 17th 2025

PLENARY SESSION

Chairpersons: Tanța Verona IORDACHE, Radu Claudiu FIERĂSCU

Room 1, 3rd floor

No.	Starting time	Presenter	Title
PS-7	09 ³⁰	Mahmoud H. Abu ELELLA	RECENT ADVANCES IN MODIFIED CHITOSAN-BASED DRUG DELIVERY SYSTEMS FOR TRANSMUCOSAL APPLICATIONS
PS-8	10 ⁰⁰	Gianluca VISCUSI	GREEN APPROACHES TO DESIGN NOVEL ADSORBENTS FOR WATER DECONTAMINATION
PS-9	10 ³⁰	Francois-Xavier PERRIN	CEMENTITIOUS COATINGS: A REALISTIC PROTECTIVE ALTERNATIVE TO ORGANIC COATINGS?
PS-10	11 ⁰⁰	Michal CEGLOWSKI	ADDRESSING TRACE CONTAMINANT CHALLENGES: NOVEL APPLICATIONS OF POROUS ADSORBENTS AND MOLECULARLY IMPRINTED POLYMERS IN AMBIENT MS

11³⁰-11⁴⁰ – Break

11⁴⁰-12³⁰ My poster in 100 seconds!

Chairpersons: Adriana FRONE, Ana Maria GURBAN

No.	Authors	Title
1	Iorin Aurel Dincă, Alexandra Gabriela Stancu, Maria Râpă	MICROPLASTIC GENERATION FROM ARTIFICIAL TURFS - A REVIEW
2	Alexandra Manea , Andrei Theodor Belea, Alina Ortan, Irina Elena Chican, Daniela Ionescu, Mihaela Avram, Cristina Mihaela Luntraru, Justinian-Andrei Tomescu	COMPARATIVE ANTIMICROBIAL EFFICACY OF KOMBUCHA-DERIVED VINEGAR AND CONVENTIONAL VINEGAR SOLUTIONS FOR REDUCING POST-HARVEST MICROBIAL CONTAMINATION ON FRESH MARKET APPLES: AN ECO-FRIENDLY DECONTAMINATION APPROACH
3	Georgeta Teodorescu (Diaconescu) , Daniela Simina Stefan, Alexia Croitoru	STUDY OF THE INFLUENCE OF AQUEOUS MEDIA ON THE CHARACTERISTICS OF PLASTIC PACKAGING
4	Sevinj Osmanova, Aytakin Asgarova , Zulfiyya Mammadova, Tamilla Abbasova, Aygun Rustamova, Shahla Tagiyeva	ALUMINA BASED NICKEL-IRON CATALYST FOR METHANE PYROLYSIS. SYNTHESIS AND STRUCTURAL PECULIARITIES

5	Aygun Rustamova, Yegana Hamzayeveva , Shahin Orudjev, Raksana Agayeveva, Firuza Pashayeveva, Rovshan Muradkhanov, Etibar Ismailov	ALUMINA-BASED Ni-Fe CATALYST FOR CARBON DIOXIDE REFORMING: STRUCTURAL AND THERMODYNAMIC FEATURES, CATALYTIC PERFORMANCE
6	Abdulov Almir , Kenzhebai Adilbek, Beisenbekova Gulziya	BOSEAN: PURIFICATION OF WATER BODIES FROM OIL POLLUTION
7	Aizere Andossova , Asif Abbas Syed	PARA-OLEUM FLUID (POF): A NOVEL MAGNETIC NANOTECHNOLOGY FOR INCREASED OIL RECOVERY FROM CONTAMINATED SOIL AND OIL SPILL INCIDENTS
8	Ansagan K Abdelova	THE WATER FILTER "ANSAQUA"
9	Khadisha Mendigaliyeva	SO ₂ LUTION: AN INNOVATIVE PORTABLE DEVICE FOR AIR PURIFICATION THROUGH CALCIUM HYDROXIDE-BASED NEUTRALIZATION
10	Madina Malik-Shapagat , Beisenbekova Gulziya	A MINI-TESTER FOR THE DETERMINATION OF PROCESSES IN FOOD PRODUCTS
11	Nuriya Amangeldi	INNOVATIVE TECHNOLOGIES FOR SCALABLE FABRICATION OF GRAPHENE: A MULTIFUNCTIONAL MATERIAL FOR ENVIRONMENTAL PROTECTION
12	Elnaz Smadyarova , Aruzhan Garifulla, Beisenbekova Gulziya, Kurmashev Erbolat	ECO-FRIENDLY STARCH PRODUCTION
13	Nurym Nurtas	DEVELOPMENT OF ELECTROSTATIC FILTERS FOR REDUCING SULFUR EMISSIONS AT THE ATYRAU OIL REFINERY
14	Ayaulim Amangosqyzy , Rakhymzhan Kossanov, Asif Abbas Syed	EVALUATION OF PEGANUM HARMALA EXTRACT AS A NATURAL SHAMPOO INGREDIENT
15	Amanat Chapay	WASTE-TO-ENERGY: THE POTENTIAL OF RDF FUEL AND ITS APPLICATION IN WASTE RECYCLING
16	Talap Aiymnur , Samat Madina	ECO-FRIENDLY BANANA PEEL INSOLES
17	Medina Daut , Asif Abbas Syed	A GREEN APPROACH TO ZNO DYE-SENSITIZED SOLAR CELLS: FABRICATION WITH NATURAL EXTRACTS

PLENARY SESSION & AUTHOR TRAINING

Chairperson: Mihaela DONI

Room 1, 3rd floor

No.	Starting time	Presenter	Title
SP-2	13 ⁰⁰	Iustina BOSTAN (Journal Relations Specialist, MDPI OPEN ACCESS Publishing Romania SRL)	ETHICAL ISSUES IN PUBLISHING
IL-2	13 ³⁰	Andrei SÂRBU (Romanian Chemical Society)	ON THE ACTIVITY OF THE BRANCH BUCHAREST 3 OF THE ROMANIAN CHEMICAL SOCIETY
13 ⁴⁵	Symposium closing & award ceremony		

Associated events

Tuesday, 14.10.2025

No.	Starting time	Moderator	Room	Title
W-1	10 ⁰⁰	-	Room 1 (3 rd floor)	Parteneriate, Sinergii și Instrumente pentru Inovare și Dezvoltare!
W-2	14 ⁰⁰	Nicolae VARACHIU	Room 1 (3 rd floor)	Research and Innovation - societal impact
W-3	08 ⁰⁰	Radu Claudiu FIERĂSCU	Room 3 (1 st floor)	Integrated approach to environmental protection – AquaMat
W-4	09 ⁰⁰	Radu Claudiu FIERASCU	Room 1 (3 rd floor)	Innovative approach for the protection of medicinal and aromatic plant crops – between circular bioeconomy and nanotechnology
W-5	08 ⁰⁰	Irina FIERASCU	Room 1 (3 rd floor)	Transdisciplinary approach for the modern formulation of construction materials, a paradigm shift in the protection of immovable cultural heritage
W-6	09 ⁰⁰	Irina Elena CHICAN	Room 1b (3 rd floor)	Advanced ecological solutions to increase the food safety of vegetables and fruits, from producer to consumer
W-7	09 ⁰⁰	Ioana Silvia HOSU	Room 3 (1 st floor)	Next generation method for studying redox signalling in plants and screening biostimulant potential formulations applied to plants: bimodal sensors.

Publication partners:

Frontiers in
Materials

A journal by  frontiers

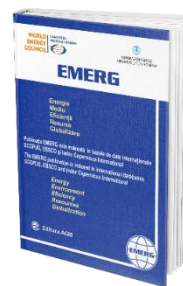
Frontiers in Materials



Polymers (MDPI)



Farmacia



EMERG

Media partner:



Exhibitor:

