

POSTER COMMUNICATIONS

	Chairpersons: André Matagne, Pankaj Vadgama, Valerică Raicu, Ioan Turcu	
Number	Authors	Title
Biophysical methods in the study of protein folding, misfolding and assembly		
P Bp 1	<u>Niculina-Sonia Suvar</u> , Ramona Bleiziffer, Paula Podea, Andreea Maria Iordache, Monica Culea	Characterization of Some Seed Extracts by Using Isotopic Dilution-Gas Chromatography-Mass Spectrometry
P Bp 2	Georgiana Petrareanu, Antonio Mondini, Paris Lavin, <u>Alina Vasilescu</u> , Cristina Purcarea	Molecular Adaptations to Low Temperatures of Cold-Active Microbial Catalysts
P Bp 3	Alina Asandei, <u>Isabela Stefania Dragomir</u> , Tudor Luchian, Aldo E Rossini, Mauro Chinappi, Yoonkyung Park	Readout of Small Peptides Primary Structure, with a Protein Nanopore
P Bp 4	<u>Ana-Maria Raicu</u> , David N. Arnosti	Adaptation of a CRISPR Interference Method for Probing Chromatin Properties of Repressor Domains
P Bp 5	<u>Alexandra Farcas</u> , Luiza Buimăgă-Iarinca, Porav Sebastian, Lorant Janosi, Calin Floare	Structural Features and Aggregation of NRas Proteins and it's Oncogenic Mutations
In-silico methods		
P Si 1	<u>Luiza Buimaga-Iarinca</u> , Alexandra Farcas, Lorant Janosi	Use of Molecular Docking as a Tool for Comparative Binding Analysis of Large Peptides to Ras Wild Type and Oncogenic Proteins
P Si 2	<u>Lorant Janosi</u> , George Necula, Mihaela Bacalum, Mihai Radu, Ioan Turcu	In silico studies on the dynamics and energetics of histidine-modulated arginine- and tryptophan-based peptides in membrane models
Analytical methods for medical physics		
P Mf 1	<u>Andreea Celia Benchea</u> , Dana Ortansa Dorohoi, Ion Hurjui, Loredana Liliana Hurjui	Solvatochromism and Quantum-mechanical Study of 8-Hydroxyquinoline: Comparison of Solvent Scales
P Mf 2	Costinela Valerica Georgescu, Cristian Catalin Gavat, Doina Carina Voinescu	Spectrophotometric UV analysis method of acetylsalicylic acid in tablets
P Mf 3	<u>Andreea Celia Benchea</u> , Dana Ortansa Dorohoi, <u>Loredana Liliana Hurjui</u> , Ion Hurjui	The Computed Parameters and Solvatochromic Study of Two Fluorescent Molecules
P Mf 4	<u>Radu Dan Necula</u> , Corneliu Drugă, Ionel Serban, Angela Repanovici, Diana Cotoros	Tribological modelling of the hip joint
P Mf 5	<u>Ioana Andreea Brezesteanu</u> , Alina Tantau, Maria Gorea, Nicolae Har, Leontin David, Simona Cinta Pinzaru	New Data on Growing Mechanism of Human Gallstones from Transylvania, Romania: A joint Confocal Micro-Raman, Polarized Light Microscopy, X-Ray Diffraction and Thermal Analysis Study
P Mf 6	<u>Carmen-Elisabeta Manea</u> , Mirela Mihon, Dana Niculae, Catalin Stelian Tuta	Quality control of radiopharmaceuticals
P Mf 7	<u>Mirela Mihon</u> , Carmen Elisabeta Manea, Dana Niculae	Validation of a color spot test for determination of Kryptofix 2.2.2 in radiopharmaceuticals production
P Mf 8	Cristina Alexandra Constantin, Claudia Chilom, <u>Mihaela Bacalum</u>	Anticancer activity of Luteolin studied in carcinoma and sarcoma cells

P Mf 9	<u>Diana Cotoros</u> , Corneliu Druga, Ionel Serban, Angela Repanovici, Radu Dan Necula	Biomechanical and thermographic study of syndromes induced by human body vibrations
P Mf 10	<u>Diana Cotoros</u> , Ionel Serban, Corneliu Druga, Anca Stanciu, Radu Dan Necula	Influence of variable frequency noise upon the human factor stability
P Mf 11	<u>Ileana-Constanta Rosca</u> , Ionel Serban, Corneliu Nicolae Druga, Dan Radu Necula	LabVIEW routine for encephalographic signal processing LabVIEW routine for encephalographic signal processing
P Mf 12	<u>Adrian Serban</u> , Sebastian Toma, Marius Moga, Monica Florescu	The prevalence of cancers and hormone replacement therapy

Novel materials and biomaterials for analytical methods

P Bm 1	<u>Manuela Stan</u> , Ildiko Lung, Adina Stegarescu , Ocsana Opris, Simona Gutoiu, Maria-Loredana Soran, Teofil-Danut Silipas, Cristian Leostean, Ovidiu Pana, Mihaela Diana Lazar, Alin Sebastian Porav	Preparation of MnO ₂ /Carbon Nanotubes with Sorption Properties
P Bm 2	<u>Maria Coros</u> , Florina Pogacean, Lidia Magerusan, Marcela-Corina Rosu, Valentin Mirel, Stela Pruneanu	A New Approach Towards the Synthesis of Graphene Based Materials
P Bm 3	Lidia Magerusan, Stefan Gergely, <u>Stela Pruneanu</u> , Florina Pogacean, Maria Coros	Electronic Portable Device for Selective Lead Ion Detection from Different Water Sources
P Bm 4	<u>Stela Pruneanu</u> , Florina Pogacean, Lidia Magerusan, Maria Coros, Marcela-Corina Rosu, Valentin Mirel	Graphene Synthesis by Exfoliation of Graphite Rod via Pulses of Current
P Bm 5	Lidia Magerusan, <u>Florina Pogacean</u> , Maria Coros, Alexandru Turza, Stela Pruneanu	Green Methodology for Chitosan/Carbon Base Nanomaterial Preparation and its Applicability in Sunset Yellow Detection
P Bm 6	Florina Pogacean , Lidia Magerusan, Maria Coros, Valentin Mirel, Stela Pruneanu	Electrochemical Detection of 8-Hydroxy-2'-deoxyguanosine Using Graphene Modified Electrodes
P Bm 7	<u>Laurentiu Susu</u> , Andreea Campu, Simion Astilean, Monica Focsan	Designing Efficient Low Cost Paper-based Sensing Nanoplatforms
P Bm 8	Maria Stefan, Ovidiu Pana, Adriana Popa , Dana Toloman, Teofil-Danut Silipas, Cristian Leostean, Sergiu Macavei, Lucian Barbu-Tudoran, <u>Manuela Stan</u>	Synthesis and Characterization of CoFe ₂ O ₄ @TiO ₂ :Tb Magnetic Recoverable Photocatalyst
P Bm 9	Cristina M. Muntean, Nicoleta E. Dina, Maria Coros, Nicoleta Tosa, Alexandru Turza, Monica Dan, Ioan Turcu	Graphene-Based SERS Platforms for Molecular Diagnosis
P Bm 10	<u>Rodica-Mariana Ion</u>	Microcapsules as Carrier Systems in Photodynamic Therapy
P Bm 11	Marcela-Corina Rosu, <u>Maria Coros</u> , Florina Pogacean, Alexandru Turza, Doina Prodan, Stela Pruneanu	Photocatalytic Ability of Cotton Pads Modified with TiO ₂ -Pt/Reduced Graphene Oxide and SiO ₂ -Pt/Reduced Graphene Oxide Composites
P Bm 12	Lacramioara Oprica, <u>Larisa Popescu</u> , Maria Balasoiu, Alexander Kuklin, Dorina Creanga	Silver nanoparticles synthesized by green chemistry method and their bioimpact on environmental microorganisms
P Bm 13	<u>Sourav Das</u> , Zoltán Gazdag, Lajos Szente, Mátyás Meggyes, Györgyi Horváth, Tamás Kőszegi	Antioxidant and Antimicrobial properties of Randomly Methylated β Cyclodextrin complexed Essential Oils
P Bm 14	Ceren Durmus, Eda Aydindogan, Zinar Pinar Gumus, Takeshi Endo, Shuhei Yamada, Suna Timur, Yusuf Yagci	Catechol-attached Polypeptide with Functional Groups as Electrochemical Sensing Platform for K2-Spice
P Bm 15	<u>Eda Aydindogan</u> , Takeshi Endo, Shuhei Yamada, Suna Timur, Yusuf Yagci	Catechol-bearing Polypeptide Modified Gold Nanoparticles for Point-of-Care Detection of Immunoglobulin G as a Cancer Biomarker

P Bm 16	<u>Melinda David</u> , Hugo C. Novais, Christopher M.A. Brett	Deep Eutectic Solvents as Ecological Media for the Development of Novel Redox Polymer-Film Modified Electrochemical Sensors
P Bm 17	<u>Adrian Blidar</u> , Bogdan Feier, Robert Săndulescu, Cecilia Cristea	Electrochemical Behaviour Of Vancomycin And Its Direct Detection On A Graphene Based Electrochemical Sensor
P Bm 18	Andra Mihaela Predescu, <u>Ecaterina Matei</u> , Maria Râpă, Cristian Pantilimon, George Coman, Cătălin Grădinaru, Cristian Predescu	Formulations and investigations of chitosan/polyvinyl alcohol blends for various applications
P Bm 19	<u>Violeta-Carolina Niculescu</u> , Nadia Paun, Marius Miricioiu, Mihaela Iordache	Highly efficient, rapid, and simultaneous removal of dyes from wastewater using mesoporous silica
P Bm 20	<u>Rita Csepregi</u> , Viktória Temesfői, Tamás Kőszegi	Multiparametric Green Fluorescent Protein-Based Microplate Cell Viability Assay
P Bm 21	<u>Ecaterina Matei</u> , Andra Predescu, Maria Rapa, Andrei Berbecaru, Claudia Dragan, Mirela Sohaciu, Cristian Predescu	Novel bio-composite used for Cr(VI) removal from effluents
P Bm 22	Maria Mihăilescu, Adina Negrea, Mihaela Ciopec, Petru Negrea, Gerlinde Rusu, Narcis Duteanu, <u>Alina Barbulescu</u>	Palladium Retrieval From Residual Waters Resulted From Galvanotechnique Industry
P Bm 23	Nadia Paun, <u>Violeta Carolina Niculescu</u> , Marius Gheorghe Miricioiu	Mesoporous silica-media for natural anthocyanins dye adsorption
P Bm 24	Ioan Milosan , <u>Monica Florescu</u> , Daniel Cristea, Mihai-Alin Pop, Tibor Bedo	Electrochemical Evaluation of Heat-Treated AISI 316 Stainless Steel in Solar Furnaces to be used as possible implant material

Medical analysis and diagnosis

P Ma 1	Cristina Surdu-Bob, <u>Cristin Coman</u> , Ene Vlase, Florica Barbuceanu, Daniela Ionita, Marius Badulescu	Copper Toxicity Of Metallic Bone Implants – A Pilot Study
P Ma 2	<u>Cristin Coman</u> , Ene Vlase, Cristina Surdu-Bob, Florica Barbuceanu, Mihaela Ene, Florina Zorila, Danut Turcu, Alexandru Anghel	Preliminary Studies On The Effectiveness Of Targeted Copper And Silver Therapy Against Established Osteomyelitis
P Ma 3	<u>Bianca Elena Popovici</u> , Maria Mitrica, Ioana Nitu, Flaviu Moldovan	Variation of Blood Pressure in Adolescents Population in Brasov District
P Ma 4	<u>George Madalin Danila</u> , Mihaela Puiu, Lucian Gabriel Zamfir, Camelia Bala	Development of an Enzyme-Linked Immunosorbent Assay to Ghrelin Agonists and Antagonists Detection
P Ma 5	<u>Christina Zalaru</u> , Veronica Georgiana Preda, Marianta Alexandra Strinou, Bianca Georgiana Patrascu, Florea Dumitrascu, Constantin Draghici, Isabela Ana Tarcomnicu, Maria Marinescu, Marilena Ferbinteanu, Andrei Juncu	Synthesis and cytotoxicity of new aminopyrazolo-benzimidazoles derivatives
P Ma 6	<u>Christina Zalaru</u> , Cristina Croitoru, Georgiana Adriana Popa, Luisa Gabriela Ilie, Florea Dumitrascu, Constantin Draghici, Rodica Tatia, Lucia Moldovan, Marilena Ferbinteanu	Synthesis, cytotoxicity and antitumor activity of new halogenoaminopyrazoles derivatives
P Ma 7	Alexandru Milentie Hada, <u>Monica Potara</u> , Sorina Suarasan, Adriana Vulpoi, Emilia Licarete, Simion Astilean	4MBA Labeled Chitosan Coated Gold-Silver Core-Shell Nanoparticles as In Vitro SERS Traceable pH Sensors
P Ma 8	<u>Monica Florescu</u> , Melinda David	Development and Evaluation of Novel Polymer-Based Tyrosinase Biosensor for Selective Dopamine Detection

Microspectroscopy

P Sp 1	<u>Cristina Balan</u> , Monica Baia	Experimental Micro-Raman and IR spectroscopic analysis of amikacin combined with DFT-based calculations
P Sp 2	<u>Alia Colnita</u> , Ana Maria Raluca Gherman, Tiberiu Szoke-Nagy, Ionut Bogdan Cozar, Nicoleta Elena Dina	The Use of In situ Surface Enhanced Raman Spectroscopy Technique for Antibiotic Resistance Determination of Pathogenic Microorganisms
P Sp 3	<u>Nelya V. Doroshkevich</u> , Grigory M. Arzumanyan, Kahramon Z. Mamatkulov, Hanna V. Bandarenka	Detection of DNA molecules by SERS spectroscopy with silvered porous silicon as an active substrate
P Sp 4	<u>Ioana Andreea Brezestean</u> , Fran Nekvapil, Leontin David, Simona Cinta Pinzaru	Microbial Community From Cojocna Balneary Lakes: Rich Resource Of Carotenoids Ascertained By Resonance Raman Micro-Spectroscopy

Analytical methods for (nano)biotechnology

P Nb 1	<u>Claudia Maria Gutu</u> , Octavian Tudorel Olaru, Anca Ungurianu, Denisa Marilena Margina, Mihaela Ilie, Dumitru Lazurca, Monica Florescu	Berries Buckthorn Oil - Subcritical Fluid Extraction, Chemical Characterization And Biological Efficacy Of A Potential Food Supplement
P Nb 2	<u>Claudia Maria Gutu</u> , Octavian Tudorel Olaru, Anca Ungurianu, Mihaela Ilie, Denisa Marilena Margina, Dumitru Lazurca, Monica Florescu	Lavandula Oil – extraction, chemical characterization and potential biological effects
P Nb 3	<u>Alina Vasilescu</u> , Claudia Valentina Popa, Simona-Carmen Litescu, Andrei Florin Danet	Antioxidant Capacity Determination by Using Nano-Oxides of MoO_3 and CeO_2
P Nb 4	<u>Adrian Pirnau</u> , Mircea Bogdan, Calin G Floare , Mihaela Mic, Silvia Neamtu	Competitive Binding of Tolmetin to b-CD and HSA
P Nb 5	<u>Alia Colnita</u> , Daniel Marconi, Maria Suciu, Lucian Barbu-Tudoran, Ioan Turcu	Fabrication of Nanotrenches and Microfluidic Channels for Biomolecular Detection
P Nb 6	Mihaela Mic, <u>Adrian Pirnau</u> , Maria Miclaus, Calin G. Floare, Iren Kasco, Mariana Palage, Mircea Bogdan	Molecular Interaction between Drugs with Antimicrobial Activity and Macromolecular Receptor
P Nb 7	<u>Livia Neagu</u> , Ioan Dorobantu	Nanoimmunosorbents based on functionalized SiO_2 nanoparticles used in affinity chromatography techniques to separate antibodies from complex biological mixtures (antisera)
P Nb 8	<u>Daniel Marconi</u> , Alia Colniță, Radu Tiberiu Brătfălean, Ioan Turcu	Single-step Fabrication Of Silicon Nanocones For Biosensing Applications
P Nb 9	Zagrai Mioara, <u>Dehelean Adriana</u> , Rada Simona, Pica Maria, Culea Eugen	Structural and optical properties of the gadolinium-lead-borate glasses and vitroceramics
P Nb 10	<u>Simona-Carmen Litescu</u> , Andrei-Florin Danet, Claudia Valentina Popa, Georgiana Badea, Viorica Tamas, Alexandru Suciu	Valorization of By-Product Rezulted in Processing of Milk Thistle Oil by Cold Pressing. Recovery of Silymarin
P Nb 11	<u>Irina Schiopu</u> , Andrei Ciuca, Alina Asandei, Aurelia Apetrei, Chang Ho Seo, Yoonkyung Park, Tudor Luchian	Exploring PNA-DNA Hybrids with a Nanopore-Based Technique
P Nb 12	Ana Maria Raluca Gherman, Daniel Marconi, Alia Colniță, Laszlo Szabo, Nicolae Leopold, Tiberiu Szoke-Nagy, Nicoleta Elena Dina	Microfluidic Portable Device for Pathogens' Rapid SERS Detection
P Nb 13	Alina Asandei, <u>Andrei Ciuca</u> , Irina Schiopu, Aurelia Apetrei, Loredana Mereuta, Chang Ho Seo, Yoonkyung Park, Tudor Luchian	Single-Molecule Study of pH- and Salt-Induced Conformational Changes of PAMAM-G1 and -G1.5 Dendrimers, with Protein Nanopores
P Nb 13	<u>Cristina Ileana Covaliu</u> , Ecaterina Matei, Iosif Hulka, Gigel Paraschiv	Study of Activated Carbon Performance For Depollution of Wastewater Containing Organic (C_6H_6 and $\text{C}_6\text{H}_5\text{-CH}_3$) And Inorganic (Pb^{+2} and Zn^{+2}) Pollutants

P Nb 14	Fran Nekvapil, I Brezestean, B Glamuzina, S Tomšić, L Barbu-Tudoran, V Chis, S Cinta Pinzaru	Natural Biocomposite Material with Antioxidant Properties and a Source of Valuable Compounds: the Cuticle of Squilla mantis Shrimp
P Nb 15	Ecaterina Matei, Cristina Covaliu, Andra Predescu, Andrei Berbecaru, Claudia Dragan, Cristian Predescu	Depollution of wastewaters using nanobiotechnology based on new TiO2 photocatalyst
P Nb 16	Lavinia Gabriela Carpen, Tomy Acsente, Diana Iulia Savu, Maria Adriana Acasandrei, Elena Matei, Claudia Gabriela Chilom, Gheorghe Dinescu	Influence of Nanometric Tungsten Dust on Fibroblasts Cells
P Nb 17	Paulina Komorek, Robert Stoklosa, Joanna Zemla, Małgorzata Lekka, Barbara Jachimska	Physicochemical characterization of poly-L-lysine and its interactions with globular proteins
P Nb 18	Larisa Popescu, Dorina Creanga, Liviu Sacarescu, Marian Grigoras, Nicoleta Lupu	The magnetic contamination of Fe ₃ O ₄ @GA against some biotic components of the environment
P Nb 19	Diana Stegarus, Constantin Paladi, Ecaterina Lengyel, Roxana Ionete	Bacteria Involvement in Biodegradation of Chlorinated Organic Compounds in Ground Water
P Nb 20	Diana Stegarus, Ramona Cristea, Roxana Ionete, Ecaterina Lengyel, Mircia Toderici	PCB and Pesticides Monitoring and its Implications to Food Quality Assessment - Case Study on Milk
P Nb 21	Leopold Tie, Monica Focsan, Cristian Tira, Andreea Campu, Adriana Vulpoi, Jocelyne Bosson, Simion Astilean	Controlling the End-to-End Assembly of Gold Nanorods to Enhance the Plasmonic Response in Near Infrared (NIR)

Atomic and nuclear methods

P Na 1	Afag Madadzada, Marina V. Frontasyeva, Sevinj R. Hajiyeva, Margarita S. Shvetsova, Zarifa T. Veliyeva, Orxan B. Hajiyev	Assessment of Atmospheric Deposition of Trace Elements in Baku (Azerbaijan) Using Moss Bags
P Na 2	Irina Fierascu, Valentin Raditoiu, Cristian Andi Nicolae, Alina Raditoiu, Raluca Somoghi, Monica Raduly, Bogdan Trica, Radu Claudiu Fierascu, Lia Mara Ditu	Analytical Characterization and Potential Applications of Metal-Substituted Apatitic Materials
P Na 3	Gabriela Ioana Cristea, Cezara Voica, Adriana Dehelean, Dana Alina Magdas, Ioana Feher, Romulus Puscas, Florina Covaciu	Application of Isotopic and Elemental Profiling in Food Products and Beverages
P Na 4	Dehelean Adriana, Kovacs Melinda, Magdas Dana Alina, Cristea Gabriela, Feher Ioana	Baby food supplements quality evaluation through different analytical methods
P Na 5	Afag Madadzada, Jalal A. Nagiyev, Aydan A. Garibli, Marina V. Frontasyeva, Adil A. Garibov	ENAA of Soil Samples from Small District of Azerbaijan: Search for Actinides
P Na 6	Radulescu Cristiana, Claudia Stihii, Monica Florescu, Dumitru Lazurca, Ioana Daniela Dulama, Sofia Teodorescu, Radu Lucian Olteanu, Raluca Maria Stirbescu	Bioactive Properties and Chemical Composition of Juglans Regia L. Extracts
P Na 7	Gabriela Ioana Cristea, Dana Alina Magdas, Cezara Voica, Ioana Feher, Romulus Puscas, Stelian Radu, Valentin Mirel	Isotopic and Elemental Fingerprint of Transylvanian Pork Meat
P Na 8	Radulescu Cristiana, Alina Bintintan, Mihai Gligor, Rodica Mariana Ion, Ioana Daniela Dulama, Claudia Stihii, Sofia Teodorescu, Raluca Maria Stirbescu, Radu Lucian Olteanu, Ioan Alin Bucurica	Pollution Effects on Painted Pottery of Romanian Cultural Heritage
P Na 9	Margarita Shvetsova, Marina Frontasyeva, Inna Kamanina, Sergey Pavlov, Afag Madadzada,	Active Moss Biomonitoring With Moss Sphagnum Grgensohnii in the Park of Moscow

	Konstantin Vergel	
Biomembranes and model membranes		
P Mm 1	<u>Corina Ciobanu</u> , Isabela Dragomir, Aurelia Apetrei, Tudor Luchian	Penetrating Properties of LyP-1 Homing Peptides in Giant Unilamellar Vesicles
P Mm 2	<u>Alexandra Besleaga</u> , Aurelia Apetrei, Lucel Sirghi	Investigation of molecular interactions between antimicrobial peptides and biomimetic lipid membranes
P Mm 3	<u>Ion Hurjui</u> , Dana Ortansa Dorohoi, <u>Ionela Lacramioara Serban</u> Andreea Celia Benchea, <u>Irina Grdinaru</u> , <u>Loredana Liliana Hurjui</u> ,	Spectral study of model membrane fluidity using a fluorescent marker
P Mm 4	<u>Bogdan Zorila</u> , Mihaela Bacalum, Mihai Radu	Evaluation of Lipid Membrane Tryptophan Rich Peptides Bound Fraction by Fluorescence Spectrum Deconvolution