

ORAL COMMUNICATIONS

June 29th, 2016	Building Aula Magna of Transilvania University of Brasov. 41 A Iuliu Maniu Street, Brasov, 500091, Romania.			
	Room UI7, Chairperson: Monica Florescu			
15.30-17.30			Registration	
17.30-17.40			Opening Ceremony	
17.40-18.20	Plenary Lecture	P1	Kalina Hristova,	Probing the Early Stages of Receptor Signalling with Quantitative Fluorescence Techniques
18.20-19.00	Plenary Lecture	P2	Caroline Montagner , Michaël Nigen , Olivier Jacquin , Gordon C.K. Roberts , Christian Damblon , Christina Redfield , <u>André Matagne*</u>	The Role of Active Site Flexible Loops in Catalysis and of Zinc in Conformational Stability of Bacillus cereus 569/H/9 β -lactamase
19.00-20.00			Welcome Party and Poster Session (odd numbers)	

June 30th, 2016	Building Aula Magna of Transilvania University of Brasov. 41 A Iuliu Maniu Street, Brasov, 500091, Romania.			
	Room UI2, Chairperson: Kalina Hristova,			
9.00-9.40	Plenary Lecture	P3	Leon WMM Terstappen*	Interrogation of Circulating Tumor Cells a tool towards personalized medicine
	Room UI2, Nanobiotechnology, Chairperson: Leon WMM Terstappen,			
9.40-10.10	Keynote,	K1	Rodica-Mariana Ion	Bio-Nanotechnology SS Enhancer in Photodynamic Therapy
10.10-10.40	Keynote,	K2	Aram J Krauson , Morgan Hall , Charles G Starr , Taylor Fuselier , W. Berkeley Kauffman , <u>William C Wimley*</u>	Conformational Fine-tuning of the Membrane Selectivity of Pore-forming Peptides.
10.40-11.05	Invited talk	O1	Ionel Popa	The Nano-Mechanics of Single Proteins
	Room UI3, Spectroscopy, Chairperson: Kalina Hristova			
9.40-10.10	Keynote,	K3	Valerică Raicu	Probing Association and Dissociation of Proteins in Living Cells: Toward Multi-Dimensional FRET Spectrometry
10.10-10.35	Invited talk	I1	Ronen Berkovich	Reconstruction Surface Potential from Atomic Friction Measurements
10.35-10.55	Contributed talk	O2	Violeta L. Calin*, Mona Mihailescu , Nicolae Mihale , Eugenia Kovacs , Tudor Savopol , Mihaela G. Moisescu	Optical and Electrical Biophysical Methods for Identification of Cellular Malignancy
11.00-11.30	Coffee Break and Poster Session (odd numbers)			
	Room UI2, Analytical methods for medical physics, Chairperson: Ioan Turcu,			
11.30-12.00	Keynote,	K4	Yuri Feldman	Unexplored Avenues of Human Skin: Reading Personal Stress in the Sub-THz Frequency Range

12.00-12.25	Invited talk	I3	<u>Horia I. Petrache*</u> , Merrell A. Johnson , Stephen R. Wassall , Bruce D. Ray	Interactions of Amino Acids with Lipid Membranes
12.25-12.45	Contributed talk	O3	<u>Mihaela Georgeta Moisescu*</u> , Bogdan Mircea Matei , Fawzia Sha'at , Luminita Claudia Miclea , Andreea Iulia Iorgu , Laura Georgiana Bajenaru , Lucia Pirvu , Cristina Hlevca , Cristian Matei , Dana Berger , Ramona Daniela Pavaloiu , Tudor Savopol	Impedance-based Real-time Monitoring of Cellular Growth for Phytotherapeutic Extracts and Porous Artificial Drug Carriers
12.45-13.05	Contributed talk	O4	<u>Eugen Gheorghiu*</u> , Cristina Polonschii , Sorin Mihai David , Mihaela Gheorghiu , Mihnea Rosu-Hamzescu , Dumitru Bratu	Plasmonic based EIS: towards a sensitive analytical method gathering the virtues of both SPR and EIS
Room UI3, Microfluidics and point-of-care microdevices, Chairperson: Séverine Le Gac,				
11.30-12.00	Keynote	K5	Holger Becker	Microfluidics – 25 Years of Hype, Hope and Hubris
12.00-12.25	Invited talk	I4	Davide Ferraro , Jerome Champ , Bruno Teste , Marco Serra , Laurent Malaquin , Jean-Louis Viovy , Patricia DeCremoux , <u>Stephanie Descroix*</u>	Droplet Microfluidics Applied to HER2 Gene Expression in Breast Cancer
12.25-12.45	Contributed talk	O5	Wayne Francis , <u>Colm Delaney*</u> , Larisa Florea , Dermot Diamond	Chemotactic Ionic Liquid Droplets: Striving to Mimic Nature
12.45-13.05	Contributed talk	O6	<u>Jennifer Deignan*</u> , Larisa Florea , Shirley Coyle , Dermot Diamond	Contactless Conductivity Sensor for Wearable Sweat Monitoring
13.00-14.00 Lunch				
Room UI2, Chairperson: Valerică Raicu				
14.00-14.40	Plenary Lecture	P4	Marius Schmidt	Ultrafast Dynamics in Proteins Investigated by Time-Resolved Serial Femtosecond Crystallography
Room UI2, Analytical methods for medical physics, Chairperson: Valerică Raicu				
14.40-15.10	Keynote	K6	Paul Shin-Hyun Park*	Atomic Force Microscopy-Based Approaches to Probe the Structure of Membrane Proteins
15.10-15.35	Invited talk	I5	Raluca Ioana Stefan-van Staden	A New Approach on Biomedical Analysis
15.35-15.55	Contributed talk	O7	<u>Diana David-Rus*</u> , Afrodita Liliana Boldea	Data mining and statistical methods that might help in understanding fluorescence experiments
15.55-16.15	Contributed talk	O8	<u>Laura Zelencova</u> , Raminta Rodaitė-Riševičienė , Viktorija Skaidrutė Dainauskaitė , Simona Kalibataitė , Gintautas Saulis*	The Influence of Medium on Amplex Red as Indicator for Fluorescent Hydrogen Peroxide during High-Voltage Electric Impulses

	Room UI3, Medical analysis and diagnosis, Chairperson: Séverine Le Gac,			
14.40-15.10	Keynote	K7	Lourdes Basabe-Desmots	Self-powered Microfluidics for Point of Care Analysis
15.10-15.35	Invited talk	I6	Valérie Taly	Microfluidics for cancer research
15.35-16.00	Invited talk	I7	Govind Kaigala	Hydrodynamic Shaping of Sub-Nanoliter Volumes of Liquids at Biological Interfaces for Tissue Microprocessing and Biopatterning
16.00-16.45 Coffee Break and Poster Session (even numbers)				
	Room UI2, Sensors and biosensors, Chairperson: Raluca Ioana Stefan-van Staden			
16.45-17.15	Keynote	K8	Amina Rhouati , Akhtar Hayat , Gaelle Catanante , <u>Jean Louis Marty*</u>	Are Biosensors Right Tools For Food Contaminants Monitoring
17.15-17.35	Contributed talk	O9	<u>Danielle Bruen*</u> , Larisa Florea , Colm Delaney , Dermot Diamond	Two-Component Fluorescent Sensing of Saccharides
17.35-17.55	Contributed talk	O10	Sandra A.V. Eremia , Iuliana Mihalache , Mihaela Kusko , Eugeniu Vasile , <u>Antonio Radoi*</u>	Molybdenum Disulfide and Graphene Quantum Dots as Electrode Modifiers for Laccase Biosensor
17.55-18.15	Contributed talk	O11	<u>Bogdan Feier*</u> , Cecilia Cristea , Robert Sandulescu	Electrochemical Methods for the Detection of β -Lactam Antibiotics
19.30-23.00	Gala Dinner (Aro Palace Club, Eroilor Blvd., no. 27-29, Brasov – Romania)			
	Room UI3, Novel materials and biomaterials for analytical methods, Chairperson: Rodica-Mariana Ion			
16.45-17.05	Contributed talk	O12	<u>Rodica Turcu*</u> , Alexandrina Nan , Teodora Radu , Anca Petran , Alexander Bunge , Monica Circu , Izabell Craciunescu	Novel Functionalized Magnetic Nanosystems with Tailored Properties for Biomedical Applications
17.05-17.25	Contributed talk	O13	<u>Luiza Buimaga-Iarinca*</u> , Cristian Morari , Ioan Turcu	Organic Molecules - Metallic System Interaction: A DFT Approach
17.25-17.45	Contributed talk	O14	<u>Eugenia Eftimie Totu*</u> , Corina Marilena Cristache , Ibrahim Isildak	Improving Poly(methyl methacrylate) Properties for Dental Application by Adding Titanium Oxide Nanoparticles
17.45-18.05	Contributed talk	O15	<u>Nicoleta Tosa*</u> , Alexandra Falamas , Cristian Tudoran , Lucian Barbu , Valer Tosa	Metallic Micro- and Nanostructured Materials as Supporting Electrodes for Biomolecular Spectroscopy
19.30-23.00	Gala Dinner (Aro Palace Club, Eroilor Blvd., no. 27-29, Brasov – Romania)			

July 1st, 2016	Building Aula Magna of Transilvania University of Brasov. 41 A Iuliu Maniu Street, Brasov, 500091, Romania.			
	Room UI2, Chairperson: Otilia Ana Culicov			
9.30-10.10	Plenary Lecture	P5	Vidmantas Ulevicius	Development and Application of Innovative Techniques for Atmospheric Organic Aerosol Composition Measurement

Room UI2, Atomic and nuclear methods, Chairperson: Vidmantas Ulevicius				
10.10-10.40	Keynote	K9	<u>Otilia Ana Culicov*</u> , Valery Shvetsov*	The Neutrons: A Powerful Tool in Environmental and Biological Studies
10.40-11.05	Invited talk	I8	<u>Claudia Stih*</u> , Ion V. Popescu , Marina Frontasyeva , Cristiana Radulescu , Antoaneta Ene , Otilia Culicov , Inga Zinicovscaia , Ioana Daniela Dulama , Simona Cucu-Man , Radu Todoran , Anca Gheboianu , Iulian Bancuta , Gabriel Dima , Alin Bucurica	Heavy Metal Air Pollution Study in Romania Using Moss Biomonitoring together with NAA and AAS Analytical Techniques
11.05-11.25	Contributed talk	O16	<u>Antoaneta Ene*</u> , Marina V. Frontasyeva	Neutron Activation Analysis as a Tool for Environmental and Materials Research
Room UI3, Sensors and biosensors, Chairperson: Jean Louis Marty				
10.10-10.40	Keynote	K10	<u>Andrei Florin Danet*</u> , Carmen Simona Litescu , Claudia Valentina Popa	Nanomaterials And Chemiluminescence Based Method for the Determination of Antioxidant Capacity
10.40-11.05	Invited talk	I9	Jacobus (Koos) Frederick van Staden	The Potential of Sensor Platforms for Dynamic Integrated Process Control in Real-Time. Are they Suitable to Function Properly in the Environment?
11.05-11.25	Contributed talk	O17	Sorin Mihai David , <u>Eugen Gheorghiu*</u> , Cristina Polonschii , Mihaela Gheorghiu , Dumitru Bratu	Advancing Magneto-Optical Surface Plasmon Resonance For Biosensing
11.25-12.00 Coffee Break and Poster Session (even numbers)				
Room UI2, Novel materials and biomaterials for analytical methods, Chairperson: Marius Schmidt				
12.00-12.20	Contributed talk	O18	<u>Aishling C Dunne*</u> , Joseph Hennessy , Síobhan MacArdle , Larisa Florea , Dermot Diamond	Photo-Responsive Hydrogels with Enhanced Volume Changes due to Local pH alterations
12.20-12.40	Contributed talk	O19	<u>Alexandru Tudor*</u> , Colm Delaney , Wayne Francis , Larisa Florea , Dermot Diamond	Solvent Sensing Fluorescent poly(Ionic Liquid) Ionogels
12.40-13.00	Contributed talk	O20	<u>Larisa Florea*</u> , Aishling Dunne , Wayne Francis , Danielle Bruen , Alexandru Tudor , Dermot Diamond	Stimuli-responsive Materials for Self-reporting Micro-fluidic Devices
13.00-13.20	Contributed talk	O21	Tugce Akyazi , Janire Saez , Lourdes Basabe-Desmonts , <u>Fernando Benito-Lopez*</u>	When Microfluidics met Smart Materials
Room UI3, Sensors and biosensors, Chairperson: Andrei Florin Danet				
12.00-12.20	Contributed talk	O22	<u>Mihaela Gheorghiu*</u> , Luciana Stanica , Cristina Polonschii , Dumitru Bratu , Octavian Popescu , Eugen Gheorghiu	A New Twist for Optogenetics: Light Driven Dynamics for Cell Based Sensing

12.20-12.40	Contributed talk	O23	<u>Anca Florea</u> , Cecilia Cristea , Nicole Jaffrezic Renault , Robert Sandulescu*	Molecularly Imprinted Electrochemical Sensors for Detection of Drugs and Pollutants
12.40-13.00	Contributed talk	O24	<u>Yawar Abbas*</u> , Fleur van Rossem , Séverine Le Gac	Oxygen Sensing using an Ultra-microelectrode array at the millisecond time-scale
13.00-13.20	Contributed talk	O25	María Virumbrales-Muñoz * , <u>Adithya Sridhar*</u> , Rosa Monge , Jose María Ayuso , Guillermo Llamazares , Ignacio Ochoa , Albert Ruggi , Luis Fernández , Séverine Le Gac *	Oxygen Sensitive Hydrogel Matrix for 3D Cell Culture and 3D Oxygen Concentration Mapping
13.20-13.40 Closing Ceremony				
13.40-14.30 Lunch				

POSTER COMMUNICATIONS

Chairpersons: Séverine Le Gac, Jean Louis Marty, Valerică Raicu, Ioan Turcu		
Number	Authors	Title
Nanobiotechnology		
PNb1	Manuela Stan*, Ildiko Lung , Maria-Loredana Soran , Cristian Leostean , Teofil-Danut Silipas , Sebastian Alin Porav	Magnetic Iron Oxide (Fe ₃ O ₄) Nanoparticles From Agro-Wastes For Removal Of Antibiotic Pollutants From Waters
PNb2	Ildiko Lung , Manuela Stan*, Ocsana Opris , Maria-Loredana Soran , Cristian Leostean , Florina Copaciu , Sebastian Alin Porav	Application Of Magnetite Nanoparticles Synthesized Using Agricultural Sources For Removal Of Lanasy Red Dye
PNb3	Daniel Marconi*, Alia Colniță , Bogdan Cozar , Ioan Turcu	Highly ordered Iron Phthalocyanine (FePc) Nanometer-Sized Layers Deposited on Si (111) 7x7 by Molecular Beam Epitaxy
PNb4	Haitham Al Keline , Livia Petrescu*, Dan Florin Mihailescu	ZnO Nanoparticles for Biosensing Applications
PNb5	Aurelia Apetrei * , Tudor Luchian	Indirect Assessment of Antimicrobial Peptides Binding Affinity to Lipid Bilayers via a Single Nanopore Sensing Technique
PNb6	Aurelia Apetrei*, Andrei Ciuca*, Jong-kook Lee , Chang Ho Seo , Yoonkyung Park , Tudor Luchian	Tuning the Interaction Environment for Single Nanopore-based Sensing of Gram-negative Bacterial Cells
PNb7	Sumayah Ibraheem , Livia Petrescu*, Dan Florin Mihailescu	Interaction of Silver Nanoparticles with Lipid Monolayer as a Model of Biological Membranes
PNb8	Olteanu Radu Lucian , Nicolescu Cristina-Mihaela* , Bumbac Marius	Characterization of Silver and Copper Nanoparticles Synthesized by Bottom-Up Approach Using Plant Extracts
PNb9	Olteanu Radu Lucian , Nicolescu Cristina-Mihaela* , Bumbac Marius	Study on the Synthesis Process of Silver Nanoparticles in Salvia Officinalis Extract Using UV-VIS Spectroscopy
PNb10	Livia Neagu*, Ioan Dorobantu	Kynetic and Thermodynamic Properties of the System Nanoimmunosorbent- Analyte (2,4-D) in the Presence of Enzymatic Label Used in Homogenous Elisa Technique for Detection Of 2,4-D from Environmental and Alimentary

		Samples
PNb11	Marcela-Corina Rosu*, Crina Socaci , Lidia Magerusan , Florina Pogacean , Maria Coros , Eموke Pall , Stela Pruneanu	Pectin-based Composites containing Graphene as Substrates for Cells Growth
Spectroscopy		
PSp1	Alia Colnita*, Daniel Marconi , Nicoleta Elena Dina , Ionut Bogdan Cozar , Nicolae Leopold , Ioan Turcu	Fabrication of Nanostructured Au Films as Promising SERS Substrates for the Detection of Pathogenic Bacteria
PSp2	Andreea Antonia Georgescu*, Andrei Florin Danet , Claudia Stihl , Cristiana Radulescu , Ioana Daniela Dulama	Evaluation of the Chemical Composition and Micronutrients of Wild and Commercial Mushrooms of Dambovita
PSp3	Claudia Gabriela Chilom*, Bogdan Zorilă , Doina Gazdaru , Aurel I Popescu	Characterization of Some Physico-chemical Properties and Interactions of Human and Bovine Serum Albumin with Mitomycin C
PSp4	Cristina M. Muntean*, Ioan Bratu	(Sub)Picosecond Dynamics in LacDNA Molecules as Probed with UV Resonance Raman Spectroscopy
PSp5	Cristina M. Muntean*, Ioan Bratu , Carmen Tripon , Nicoleta Dina	(Sub)Picosecond Relaxation Processes in Nucleic Acids Constituents and in DNA Molecules: a Raman and Surface-Enhanced Raman Spectroscopy Assessment
PSp6	Mircea Bogdan*, Adrian Pirnau , Silvia Neamtu , Calin G Floare	¹ H NMR Characterization of the Host – Guest Inclusion Complex between β – Cyclodextrin and Tolmetin
PSp7	Adrian Pirnau*, Mircea Bogdan , Calin G Floare , Mihaela Mic , Silvia Neamtu	NMR study on the Low-Affinity Interaction of Human Serum Albumin with Zidovudine
PSp8	Ionut Bogdan Cozar*, Daniel Marconi , Alia Colniță , Ioan Turcu	Spectroscopic Investigation Of Iron Phthalocyanine (FePc) Molecular Layers Deposited On Au/Si
PSp9	Ahmed Kareem Hammood Jaberl , Maria Mernea , Octavian Calborean , Dan Florin Mihailescu*	Lipopolysaccharide Association with Allantoin Crystals Addressed through THz and FTIR Spectroscopy
PSp10	Bogdan Zorila*, Mihaela Bacalum	Study of the Interaction Between Antimicrobial Peptides and Model Cell Membranes by Steady State and Time Resolved Fluorescence
PSp11	Adina Elena Scripa (Tudose) , Dan Gheorghe Dimitriu , Dana Ortansa Dorohoi*	Dispersion Of Visible Rotatory Power For Aqueous Glucose Solutions
PSp12	Cezarina Ana Morosanu , Andreea Celia Benchea , Daniela - Babusca , Dan Gheorghe Dimitriu , Dana Ortansa Dorohoi*	Quantum Mechanical Characterization And Solvatochromic Study Of Quercetin
PSp13	Andreea Celia Benchea*, Daniela - Babusca , Dan Gheorghe Dimitriu , Crtomir - Podlipnik	Solvatochromic Study And Quantum-mechanical Characterization Of Methyl Red
PSp14	Daniela - Babusca , Andreea Celia Benchea , Dan Gheorghe Dimitriu , Dana Ortansa Dorohoi*	Spectral And Quantum Mechanical Study of 3-(2-Benzothiazolyl)-7-(Diethylamino)-Coumarin In Binary Solutions
PSp15	Cristiana Rădulescu , Claudia Stihl , Dumitru Lazurcă , Oana Bute , Romulus Gruia , Mihaela Ilie , Octavian Olaru , Ioana-Daniela Dulamă , Raluca Știrbescu , Sofia Teodorescu , Monica Florescu *	Characterization of Phenolic Constituents of Lavandula Angustifolia Mill. Extracts
Microfluidics and point-of-care microdevices		
PMp1	Mihai Lungu*, Adrian Neculae , Antoanetta Lungu , Nicolae Strambeanu	Investigations Regarding Possibility on Flue Gas Filtration by Selective Retaining of Nanoparticles using Positive Dielectrophoresis
PMp2	Mihăiță Nicolae Ardeleanu*, Emil Lungu , Ioan Tivig , Tudor Savopol , Mihaela G. Moisescu *	Innovative Integrated System for Sorting and Extraction of Adherent Cells

PMp3	Mihăiță Nicolae Ardeleanu*, Florina Violeta Anghelina , Simona Mihai , Vasile Bratu , Ileana Nicoleta Popescu *	Design of Microfluidic Device and Measurement of MPWM for Single Cell/Particle Manipulation
Analytical methods for medical physics		
PMf1	Alina Giorgiana Galon (Negru) , Romeo Iulian Olariu , Cecilia Arsene *	Ion Chromatographic Analysis of Atmospheric Particles with Potential Impact on Human Health
PMf2	Viktorija Skaidrutė Dainauskaitė*, Raminta Rodaitė-Riševičienė , Gintautas Saulis	Generation of Hydrogen Peroxide by High-Voltage Pulses in Cell-Free Media
PMf3	Florina Dorina Covaciu*, Olivian Ciprian Marincas , Alina Dana Magdas , Zaharie Moldovan	Determination of trace pesticides in carrot samples having different origin by chromatography and mass-spectrometry methods
PMf4	Cezara Voica*, Ioana Feher , Dana Alina Magdas , Gabriela Cristea	Metal Content in Selected Vegetables from the Romanian Market and Estimation of the Daily Intake
PMf5	Anca Daniela Farcas*, Augustin Mot , Vlad Toma , Laurian Vlase , Silvia Neamtu , Marcel Parvu	Comparative Antioxidant and Prooxidant Activities of Five Plantago Species
PMf6	Georgiana Mardare (Balusescu) , Romeo Iulian Olariu , Cecilia Arsene*	Gas Chromatography/Mass Spectrometry (GC/MS) as Challenging Problems Solving Microanalytical Tools
PMf7	Mihaela Streza*, Bogdan Belean , Maria Miclaus	On the Improvement of Lock-in Thermography Detection of Microgaps Located at the Tooth-filling Interface
PMf8	Lorant Janosi*, Mihaela Bacalum , Mihai Radu , Florina Zorila , Ioan Turcu	The Effect of the 3D Hydrophobic Moment of Short ARG- and TRP-Based Peptides on Charged Membranes
PMf9	Alexandra Farcaș, Luiza Buimagă-Iarinca, Calin Floare, Lorant Janosi*	Plasma Membrane Model Dynamics in the Presence of Ras Protein Nanoclusters
PMf10	Lucia Elena Enciu*, Madalina Croitoriu , Gabriel Baranga , Alexandru Mihail Oprea , Amalia Constantinescu , Claudia Gabriela Chilom	Retrospective Analysis of Cases Treated in HDR Brachytherapy Compartment, of Patients with Neoplastic Diseases in Gynecological Area
PMf11	Mihaela Bacalum	Antimicrobial Peptides Show Antitumor Activity Against SH-SY-5Y Human Neuroblastoma Cells
PMf12	Yassine Kadmi , Lidia Favier*, Mariana Liliana Pacala , Dominique Wolbert	A Sensitive Analytical Approach for the Screening of a Toxic Chlorinated Aromatic Compound at Ultra-Trace Levels in Water Samples
Medical analysis and diagnosis		
PMA1	Avgustina Krasimirova Danailova*, Svetla Jeliaskova Todinova , Lidia Gartcheva , Sashka Boichova Krumova , Stefka Germanova Taneva	Calorimetric Monitoring of Patients with Multiple Myeloma after Autologous Stem-Cells Transplantation
PMA2	Elisabeta Antonescu*, Felicia Gabriela Gligor , Maria Totan	Quantitative Determination of Fe 3+ in Pharmaceutical Forms by Means of UV-VIS Spectrophotometry
PMA3	Livia Chilug*, Radu A. Leonte , Alina Raicu , Marcela E. Barbinta Patrascu , Alexandru C. Ion , Catalin Tuta , Dana Niculae	Improving Tumor Uptake and Retention of 68Ga Radiolabeled Compounds Using Gold Nanoparticles as Intracellular Delivery System
Sensors and biosensors		
PSb1	Andrei Florin Danet*, Liliana Parcalabu , Claudia Valentina Popa , Roxana Porumb , Elena Branduse , Alina Vasilescu *	Antioxidant Potential of Aronia-Enriched Wines Assessed by Chemiluminometric, Spectrophotometric and Electrochemical Methods
PSb2	Luiza Buimaga-Iarinca , Cristian Morari*	DFT investigation of SubPC migration on metallic surface
PSb3	Sarmad Al Hadeethi , Catalin Dumitru Petrescu	Conductance Recorder for Biomedical

	*, Livia Petrescu , Dan Florin Mihailescu	Applications
PSb4	Lidia Magerusan*, Crina Socaci , Florina Pogacean , Maria Coros , Marcela-Corina Rosu , Alexandru Turza , Stela Pruneanu	N-doped Graphene Nanomaterial for Chemical/Electrochemical Detection of H ₂ O ₂
PSb5	Irina Schiopu*, Sorana Iftemi , Tudor Luchian	Probing The Key Metal Binding Residues In Mutant Amyloid Peptides
PSb6	Pavel Barko, Adrian Șerban, Monica Florescu*	Sensors for lipo- and hidrosoluble antioxidant compounds in vegetal resources extracts
Novel materials and biomaterials for analytical methods		
PBm1	Claudiu Filip , Crina Anca Socaci , Flavia Adina Martin , Ioana Georgeta Grosu *, Irina Elisabeta Kacso , Maria Olimpia Miclăuș , Mirabela Ligia Golban , Xenia Filip	Supramolecular Systems for Drug Delivery Applications
PBm2	Flavia Adina Martin , Monica Florescu , Teodora Radu , Rodica Turcu , Claudia Lar Claudia Lar , Niculina Hadade , Ion Grosu , Ioan Turcu *	Terpyridine-Terminated Self-Assembled Monolayers on Gold Substrate for Metal Ions Sensing
PBm3	Camelia Berghian-Grosan *, Alexandru Radu Biris , Fumiya Watanabe , Alexandru Sorin Biris	Graphene-Bimetallic Nanoparticles Hybrid Materials for DNA Bases Detection
PBm4	Silvia Neamtu*, Daniel Marconi , Flavia Adina Martin , Ioan Turcu	Fe Ions Caption by Terpyridine Functionalized Au Substrate Analyzed by Impedance Spectroscopy
PBm5	Lidia Magerusan*, Crina Socaci , Florina Pogacean , Maria Coros , Marcela-Corina Rosu , Stela Pruneanu	Graphene-Porphyrin Based Electrodes for H ₂ O ₂ Electrochemical Detection
PBm6	Ecaterina Matei , Andra Predescu*, Claudia Dragan , Cristian Pantilimon , Cristian Predescu	Methods for Assessment of Two Promising Nano-hybrids Materials used for Metallic Ions Removal
PBm7	Cristian Predescu , Sorin Ciuca , Ecaterina Matei*, Andra Predescu , Mirela Sohaciu , Andrei Berbecaru	Structure and Properties of some Metallic Biomaterials from system Ti-Nb-Fe used in Implantology
PBm8	Elena Bacalum	Optimization of Solid Phase Extraction Based On Molecular Imprinted Adsorbents for Furaltadone
PBm9	Melinda David, Christopher Brett*, Monica Florescu*,	Evaluation of Conductor Polymer with Layer-by-Layer based Architecture for Glucose Biosensing
PBm1	Claudiu Filip , Crina Anca Socaci , Flavia Adina Martin , Ioana Georgeta Grosu *, Irina Elisabeta Kacso , Maria Olimpia Miclăuș , Mirabela Ligia Golban , Xenia Filip	Supramolecular Systems for Drug Delivery Applications
Atomic and nuclear methods		
PNa1	Dana Alina Magdas , Gabriela Ioana Cristea*, Cezara Voica	Stable Isotope Fingerprinting In Pharmaceuticals Authentication
PNa2	Elena Zubcov , Antoaneta Ene*, Victor Ciornea , Lucia Bilețchi , Natalia Zubcov	The Study of Metal Migration in the Aquatic Environment
PNa3	Mirela Mihon*, Dana Niculae , Alina Catrinel Ion , Catalin Stelian Tuta , Vasile Lavric	Improved method for determination of identity and chemical purity of [18F]FLT
PNa4	Florina Dorina Covaciu * , Alina Dana Magdas , Adriana Dehelean , Gabriela Ioana Cristea , Ioana Coralia Feher , Romulus Horatiu Puscas	Multi-elemental, isotopic and trace pesticides analysis of wild and cultivated berries species
PNa5	Gabriela Ioana Cristea*, Dana Alina Magdas , Cezara Voica , Romulus Puscas	Vegetable Characterization Using Stable Isotope And Elemental Signature
PNa6	Cezara Voica * , Diana Lazar , Gabriela Blanita , Dana Alina Magdas	Wastewater decontamination using highly porous Metal Organic Framework (MOF) and nanostructured carbon materials

PNa7	Diana Costinel*, Roxana Elena Ionete , Oana Romina Botoran , Raluca Popescu , Elisabeta Irina Geana	Oxygen isotope ratios in the ethanol and water of Romanian wines as approach in improving the assessment of ethanol origin and illegal watering
PNa8	Roxana Elena Ionete*, Diana Costinel , Diana Ionela Stegarus , Oana Romina Botoran , Claudia Sandru , Elisabeta Irina Geana	Characterisation and Classification of Wines from Some Grape Varieties Grown in Romania: An Approach Based on Metals and Phenolic Compounds