



XVth National Conference of Romanian Society of Pure and applied Biophysics

Programme



FRIDAY, 07th September 2018

9.00 - 12.00		Conference Registration	
12.00-12.30		Opening Ceremony	30 min
12.30-13.30	I1	Invited presentation 1. Vlad Sandulache (Baylor College of Medicine): <i>A role for magnetic resonance imaging (MRI) in detecting normal tissue toxicity and antitumor activity of ionizing radiation</i> Chairman: Mihai Radu	60 min
13.30-14.30		Light lunch Break	60 min
14.30-16.30		Session 1: Translational Biophysics & Biophysics of Tissue Engineering Chairmen: Ioan Turcu, Dana Cucu	120 min
14.30-14.45	O1	Aurel Popescu (University of Bucharest): <i>Progress in Optogenetics. A Short Review</i>	15 min
14.45-15.00	O2	Sanda Maria Crețoiu (Carol Davila University of Medicine and Pharmacy): <i>Regenerative properties of telocytes</i>	15 min
15.00-15.15	O3	Monica Micloș-Balica (Victor Babes University of Medicine and Pharmacy): <i>Evaluation Of The Accuracy And Reliability Of Body Composition Analysis By Ultrasound Anthropometry</i>	15 min
15.15-15.30	O4	Bogdan Amuzescu (University of Bucharest): <i>A New CiPA-compliant Cardiac Safety Pharmacology Automated Patch-Clamp Assay on Cor.4U® Cardiomyocytes</i>	15 min
15.30-15.45	O5	Mihai Radu (Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering): <i>Could the endothelial muscarinic receptors be a gate in the</i>	15 min

		<i>pilocarpine induced epilepsy mechanism?</i>	
15.45-16.00	O6	Corina Ciobănașu (Alexandru Ioan Cuza University): <i>The N-terminal of Talin Inhibits Actin Assembly</i>	15 min
16.00-16.15	O7	Beatrice Mihaela Radu (University of Bucharest): <i>Methylglyoxal influences viability, migration rate and actin filaments organisation of brain microvascular endothelial cells</i>	15 min
16.15-16.30	O8	Adrian Neagu (Victor Babeș University of Medicine and Pharmacy): <i>3D bioprinting of model tissues that recapitulate the tumor microenvironment</i>	15 min
16.30-17.00		Coffee Break	30 min
17.00-18.30		Abl&e-Jasco presentation	20min
		Poster session 1: Odd numbers	70 min
18.30-19.30		Welcome cocktail	60 min

SATURDAY, 08th September, 2018

09.00-10.00	I2	Invited presentation 2. Gabriel Popescu (University of Illinois): <i>Studying dynamics of 3D cellular systems using quantitative phase imaging</i> Chairman: Tudor Savopol	60 min
10.00-10.30		Coffee Break	30 min
10.30-12.30		Session 2: Membrane and cellular biophysics Chairmen: Adrian Neagu, Bogdan Amuzescu	120 min

10.30-10.45	O9	Mihaela Bacalum (Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering): <i>Effect of antimicrobial peptides in combination with gamma radiation on bacteria</i>	15 min
10.45-11.00	O10	Ramona Babeş (Carol Davila University of Medicine and Pharmacy): <i>A new approach for identifying the sub-cycling cells using propidium iodide flow cytometry assay</i>	15 min
11.00-11.15	O11	Dana Cucu (University of Bucharest): <i>Biophysical methods of ion channels studies in tumoral cells</i>	15 min
11.15-11.30	O12	Violeta Călin (Carol Davila University of Medicine and Pharmacy): <i>Digital Holographic Microscopy As a Tool for Evaluation Of Cells and Tissues Malignancy</i>	15 min
11.30-11.45	O13	Răzvan Airini (University of Bucharest): <i>Changes induced by senescence in human amniotic fluid stem cells</i>	15 min
11.45-12.00	O14	Christien Oktaviani Matei (Carol Davila University of Medicine and Pharmacy): <i>Multiparametric Evaluation of Platelets from Chronic Myeloproliferative Neoplasms Patients</i>	15 min
12.00-12.15	O15	Florentina Cojocaru (University of Bucharest): <i>Studies of the relationship between proinflammatory cytokines and TRP channels in a newly- developed gemcitabine-resistant pancreatic tumour cell line (Panc-1GEM).</i>	15 min
12.15-13.30		Lunch Break	75 min
13.30-15.00		Session 3: <i>In silico</i> biophysics Chairmen: <i>Aurel Popescu, Beatrice Mihaela Radu</i>	90 min

13.30-13.45	O16	Dan Florin Mihăilescu (University of Bucharest): <i>Epithelial sodium channel blockage by amiloride addressed with THz spectroscopy and molecular modeling</i>	15 min
13.45-14.00	O17	Adina Milac (Institute of Biochemistry of the Romanian Academy): <i>Theoretical approaches disclose the importance of structural dynamics for protein function and interactions</i>	15 min
14.00-14.15	O18	Adriana Isvoran (West University of Timișoara): <i>Computational assessment of the pharmacological profiles of chitin and chitosan small oligomers</i>	15 min
14.15-14.30	O19	Laurențiu Spiridon (Institute of Biochemistry of the Romanian Academy): <i>Applications of Robot Mechanics in Biomolecular Statistical Physics</i>	15 min
14.30-14.45	O20	Daniel Șterbuleac (Alexandru Ioan Cuza University): <i>A New Hypothesis Regarding the Structural Determinants of TASK Ion Channels Blockade by Pharmaceutical Compounds</i>	15 min
14.45-15.00	O21	Andrei-Jose Petrescu (Institute of Biochemistry of the Romanian Academy): <i>Modelling Biomolecular Systems with Experimental and Bioinformatic Constraints</i>	15 min
15.00-15.30		Coffee Break	30 min
15.30-17.00		Poster session 2: Even numbers + Sponsor presentation	90 min
17.00-18.00		RSPAB Meeting	60 min
19.30-22.00		Gala Dinner – Locanda Jariște	

SUNDAY, 09th September, 2018

09.00-10.00	I3	Invited presentation 3. Daniel Fologea (Boise State University): <i>Regulatory Mechanisms of Lysenin Channels and Biophysical Consequences</i> Chairman: Dan Florin Mihăilescu	60 min
10.00-10.30		Coffee Break	30 min
10.30-12.00		Session 4: Nanobiophysics & Single molecule biophysics Chairmen: Mihaela Moisescu, Speranta Avram	90 min
10.30-10.45	O22	Monica Florescu (Transilvania University of Brasov): <i>Biomolecular Interaction Evaluation using Label-free Methods</i>	15 min
10.45-11.00	O23	Alia Colniță (National Institute for Research and Development of Isotopic and Molecular Technologies): <i>Detection and Identification of Pathogenic Microorganisms Using Ultrasensitive Raman Spectroscopy</i>	15 min
11.00-11.15	O24	Constantin Mihai Lucaciu (Iuliu Hațieganu University of Medicine and Pharmacy): <i>Vibrational spectroscopy of blood components for diagnostic purposes of breast cancer</i>	15 min
11.15-11.30	O25	Ștefania D. Iancu (Babes-Bolyai University): <i>Iron Oxide-Gold Nanoparticles Functionalised with Glucose as Potential Superparamagnetic Contrast Agents</i>	15 min
11.30-11.45	O26	Maria Mernea (University of Bucharest): <i>Molecular modelling of the interaction of silver nanoparticles with phospholipid and bacterial lipopolysaccharide monolayers</i>	15 min
11.45-12.00	O27	Alina Asandei (Alexandru Ioan Cuza University): <i>Protein Nanopores? Useful</i>	15 min

		<i>Tools to Decipher the Properties and Composition of Peptides</i>	
12.00-13.00		Lunch Break	60 min
13.00-14.00		Session 5: Applications in biophysics Chairmen: Monica Florescu, Maria Mernea	60 min
13.00-13.15	O28	Cosmin Cătălin Mustăciosu (Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering): <i>Biocompatibility of a New Type of Nanostructured Titanium Implant for Dental Application</i>	15 min
13.15-13.30	O29	Luminița Miclea (Carol Davila University of Medicine and Pharmacy): <i>Biocompatibility Studies of Nanoparticles on Adherent Cell Lines</i>	15 min
13.30-13.45	O30	Livia Neagu (Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering): <i>Method of Spectral Differences Applied in the Characterization of the Protein-Pesticide Immunogenic Conjugates Used in the Homogeneous nanoELISA Technique for the Detection of Dicamba Pesticide from Alimentary and Environmental Samples</i>	15 min
13.45-14.00	O31	Dumitru Popescu (Institute of Mathematical Statistics and Applied Mathematics): <i>The influence of the external bath size on the number of cycles of the a lipid unilamellar vesicle under hypotonic conditions</i>	15 min
14.00-14.30		Closing ceremony Best Poster Awards Excellence in Research Award RJB Full Article Awards	30 min

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