

# 11<sup>th</sup> NATIONAL CONFERENCE OF BIOPHYSICS

10 – 12 NOVEMBER, SIBIU, ROMANIA

## PRELIMINARY PROGRAM

Thursday, November 10

10 <sup>00</sup> – 14 <sup>00</sup>	<b>Registration</b>
14 <sup>00</sup> – 14 <sup>20</sup>	<b>Opening Ceremony</b>
14 <sup>20</sup> – 15 <sup>10</sup>	<b>Keynote Lecture</b> Ioan Kosztin <i>Multiscale Modeling of the Biomechanics of Multicellular Systems</i>
15 <sup>10</sup> – 17 <sup>10</sup>	<b>Oral Presentations</b> Chairman: Tudor Savopol
15 <sup>10</sup> – 15 <sup>30</sup>	<u>Alina Asandei</u> , Loredana Mereuță, Tudor Luchian <i>Single Molecule Investigations of the pH-dependent Interaction Between Ampicillin and a Hybrid <math>\alpha</math>-Haemolysin Protein Pore</i>
15 <sup>30</sup> – 15 <sup>50</sup>	<u>Mihaela Bacalum</u> , Bogdan Zorilă, Elena Angheluță, Mihai Radu <i>Laurdan Fluorescence Spectroscopy as a Tool to Investigate Lipid Bilayer Dynamics</i>
15 <sup>50</sup> – 16 <sup>10</sup>	Veronica Beswick, <u>Adriana Isvoran</u> , Pierre Nedellec, Alain Sanson, Nadege Jamin <i>Analysis of Interactions between the Crac Motif of Caveolin-1 And Lipids by Molecular Dynamics Simulation</i>
16 <sup>10</sup> – 16 <sup>30</sup>	<u>Luiza Budeanu</u> , Daniela Pricop, Ana Cazacu, Viorel Melnig <i>The Confirmation of Silver Nanoparticles Dissolution by UV-VIS Spectroscopy Correlated with MIE Simulation</i>
16 <sup>30</sup> – 16 <sup>50</sup>	<u>Ana Cazacu</u> , Daniela Pricop, Luiza Budeanu, Viorel Melnig <i>Gold-Chitosan Functionalized Nanoparticles Stability Study at Room Temperature</i>

<b>16<sup>50</sup> – 17<sup>10</sup></b>	<u>Dan Chicea</u> , Bogdan Neamtu , Radu Chicea, Liana Maria Chicea <i>Using AFM for Imaging RBCS And HSA</i>
<b>17<sup>10</sup> – 17<sup>30</sup></b>	<b>Coffee Break</b>
<b>17<sup>30</sup> – 18<sup>30</sup></b>	<b>Poster Session (odd poster numbers)</b>
<b>19<sup>30</sup> – 22<sup>00</sup></b>	<b>Cocktail</b>

### Friday, November 11

<b>9<sup>00</sup> – 9<sup>50</sup></b>	<b>EBSA Lecture (TBA)</b>
<b>9<sup>50</sup> – 10<sup>10</sup></b>	<b>Coffee Break</b>
<b>10<sup>10</sup> – 11<sup>30</sup></b>	<b>Oral Presentations</b> Chairman: Ioan Turcu
<b>10<sup>10</sup> – 10<sup>30</sup></b>	<u>Artur Cristea</u> , Adrian Neagu, Victor Sofonea <i>Lattice Boltzmann Simulations of the Time Evolution of Living Multicellular Systems</i>
<b>10<sup>30</sup> – 10<sup>50</sup></b>	<u>Eugenia Kovacs</u> , Tudor Savopol, Mihaela Moisescu, Maria Iordache, C. Istrate, L. Rădăcină <i>Biophysical Study of the Altered Membrane Organization Induced by Gentamicin</i>
<b>10<sup>50</sup> – 11<sup>10</sup></b>	<u>Francoise Marga</u> , Karoly Jakab, Chirag Khatiwala, Benjamin Shepherd, Scott Dorfman, Bradley Hubbard, Stephen Colbert and Gabor Forgacs <i>Organ Printing: A Self-Assembly-Based Tissue Engineering Paradigm</i>
<b>11<sup>10</sup> – 11<sup>30</sup></b>	<u>Loredana Mereuță</u> , Alina Asandei, Tudor Luchian <i>A Signal from the Other Side: The Influence of Membrane Electrostatic Asymmetry on Alamethicin Kinetic and Transport Features</i>
<b>11<sup>30</sup> – 12<sup>30</sup></b>	<b>Poster Session (even poster numbers)</b>
<b>12<sup>30</sup> – 14<sup>00</sup></b>	<b>Lunch</b>

14 <sup>00</sup> – 15 <sup>40</sup>	<b>Oral Presentations</b> Chairman: Adriana Isvoran
14 <sup>00</sup> – 14 <sup>20</sup>	<u>Maria Mernea</u> , Octavian Calborean, Dan Mihăilescu, Dana Cucu <i>Cd<sup>2+</sup> Interaction with the Epithelial Na<sup>+</sup> Channel Investigated by Electrophysiological and Molecular Modeling Methods</i>
14 <sup>20</sup> – 14 <sup>40</sup>	Maria Mernea, Octavian Calborean, Oana Sandu, Traian Dascălu, <u>Dan Mihăilescu</u> <i>Bovine Serum Albumin Structure and Flexibility Investigated by THz Spectroscopy and Molecular Modeling</i>
14 <sup>40</sup> – 15 <sup>00</sup>	<u>Adina L. Milac</u> , Andriy Anishkin, H. Robert Guy, Andrei-J. Petrescu <i>Improving Accuracy of Ion Channels Computational Models Using Symmetry Constraints</i>
15 <sup>00</sup> – 15 <sup>20</sup>	<u>Mihaela Georgeta Moiescu</u> , Mihai Radu, Maria-Minodora Iordache, Iurie Roateși, Eugenia Kovacs, Tudor Savopol <i>Dielectrophoresis – Tool to Evaluate Electric Parameters of Electroporated Cells</i>
15 <sup>20</sup> – 15 <sup>40</sup>	<u>Marcela Elisabeta Barbița Pătrașcu</u> , Gabriel Baranga, Adrian Cojocariu, Nicoleta Maria Badea, Laura Țugulea <i>Nanobiomaterials Based on Carbon Nanotubes and Artificial Lipid Bilayers</i>
15 <sup>40</sup> – 16 <sup>00</sup>	<b>Coffee Break</b>
16 <sup>00</sup> – 18 <sup>00</sup>	<b>Special Topic Symposium</b> <b>“Solute effects on the structure and function of proteins and peptides“</b>
	<u>Sarolta Bankó</u> , Zsuzsanna Kucsma, Csaba Bagyinka <i>The Autocatalytic Reaction of Hynsl Hydrogenase Enzyme from Thiocapsa Roseopersicina</i>
	Petro Khoroshyy, András Dér, <u>László Zimányi</u> <i>Hofmeister Salts and the Photocycle Kinetics of Photoactive Yellow Protein</i>
	Monica Neagu, György Váró, Géza Groma, <u>Adrian Neagu</u> , László Zimányi and

	András Dér <i>Cosolute Effects on the Bacteriorhodopsin Photocycle</i>
<b>18<sup>00</sup> – 19<sup>30</sup></b>	<b>General Assembly of SRBPA</b>
<b>20<sup>00</sup> – 23<sup>00</sup></b>	<b>Gala dinner</b>

### Saturday, November 12

<b>9<sup>00</sup> – 12<sup>00</sup></b>	<b>Oral Presentations</b> Chairman: Julianna Szakacs
<b>9<sup>00</sup> – 9<sup>20</sup></b>	<u>Ileana Petcu</u> , Cosmin Mustăciosu, Sorin Bercea, Diana Savu <i>Bystander Effects Induced by Ionising Radiation and Bleomycin in Fibroblast Cell Lines</i>
<b>9<sup>20</sup> – 9<sup>40</sup></b>	<u>Simona Cîntă Pînzaru</u> , Alexandra Falamas, Cristina Dehelean, Camelia Lehene <i>In Vivo Raman Depth Profiling for Skin Pathology</i>
<b>9<sup>40</sup> – 10<sup>00</sup></b>	Alin Gabriel Popescu, Ecaterina Mărieș, <u>Dumitru Popescu</u> <i>The Programming of the Pulsatory Liposome Working</i>
<b>10<sup>00</sup> – 10<sup>20</sup></b>	<u>Daniela Pricop</u> , Ana Cazacu, Luiza Budeanu, Laura Ursu, Manuela Pintilie, Liliana Tarțău, Viorel Melnig <i>Optical Activity Enhancement of Gold Nanoparticles Functionalized with Chitosan via Visible Irradiation Treatment</i>
<b>10<sup>20</sup> – 10<sup>40</sup></b>	<b>Coffee Break</b>
<b>10<sup>40</sup> – 11<sup>00</sup></b>	<u>Beatrice Mihaela Radu</u> , Diana Rotaru, Adina Iancu, Dorel Lucian Radu, Mihai Radu <i>Biophysical Approach of the Diabetic Neuropathy in Peripheral Sensory Neurons</i>
<b>11<sup>00</sup> – 11<sup>20</sup></b>	<u>Tudor Savopol</u> , Iurie Roateși, Eugenia Kovacs <i>Calibration of Optical Trapping Force Using Dielectrophoresis of Functionalized Silica Beads</i>

<b>11<sup>20</sup> – 11<sup>40</sup></b>	<u>Ioan Turcu</u> , Mihaela Mic, Izabell Crăciunescu, Crina Socaci, Rodica Turcu <i>Noncovalent Intermolecular Interactions Characterized by Nanocalorimetric Techniques</i>
<b>11<sup>40</sup> – 12<sup>00</sup></b>	<u>Laura Țugulea</u> , Marcela Elisabeta Barbița Pătrașcu, Tudor Luca Mitran, Gabriel Baranga, Cătălin Geantă <i>Biophysical Studies on Nanobiocomposites Based on Lipids and Chlorophyll</i>
<b>12<sup>00</sup> – 12<sup>30</sup></b>	<b>Closing ceremony</b>
<b>12<sup>30</sup> – 14<sup>00</sup></b>	<b>Lunch</b>
<b>14<sup>00</sup> – 22<sup>00</sup></b>	<b>Touristic Program</b>