

Program

Tuesday, May 3, 2022

	12:10 - 13:30	Lunch / Registration
	13:30 - 13:40	Opening of the conference
	13:40 - 14:30	Plenary Lecture - Neuroscience
Chair		Ľ. Lacinová
PL1		A. Dhoundiyal, V. Goeschl, S. Boehm, H. Kubista and M. Hotka <i>Coupling between neuronal electrical activity and metabolism.</i>
	14:30 - 15:10	Neuroscience
Chair		M. Hotka
	14:30 - 14:50	
SC1		L. Hoppanová, B. Jurkovičová-Tarabová, A. Idunková, M. Tomko, M. Dubovický, Ľ. Lacinová <i>Alteration of hippocampal excitability by prenatally applied antidepressant</i>
	14:50 - 15:10	
SC2		M. Šimera , M. Veterník, L. Martvoň, K. F. Morris, T. Pitts, D.C. Bolser, I. Poliacek <i>Cough modulation by changes in afferent inputs at low temperature</i>
	15:10 - 15:30	Company presentation - NanoTemper
Chair		M. Cagalinec
CP1		P. Kania <i>Newest solutions for biophysical characterization of challenging interactions, and protein samples</i>
	15:30 - 16:00	Coffee break
	16:00 - 17:00	Singlet oxygen & Photodynamic Therapy
Chair		A. Marček Chorvátová
	16:00 - 16:20	
SC3		S. Tomkova, S. Kolesarova and K. Stroffekova <i>Effects of photobiomodulation on rotenone challenged human glioma cells</i>
	16:20 - 16:40	
SC4		A. Hovan , D. Sedláková, M. Berta, G. Bánó and E. Sedlák <i>Singlet oxygen deactivation as a probe of heme availability in heme proteins</i>
	16:40 - 17:00	
SC5		E.Sedlák <i>Flavoproteins as singlet oxygen producers</i>
	17:00 - 17:20	Methods - Biophysics of Sequenation
Chair		E. Sedlák
		M. Karhanek , A. Zahradníková
ML1		<i>Electrical detection of DNA synthesis</i>
	17:20 - 17:45	Company presentation - SAFTRA photonics
Chair		M. Cagalinec
CP2		P. Miškovský , G. Bánó <i>Be always in control of water quality - PickMol™ technology, SAFTRA Photonics Ltd</i>
	17:45 - 18:00	Welcome drink
	18:00 - 19:00	Dinner
	19:00 - 21:30	Poster Session I (all posters)

Wednesday, May 4, 2022

	7:30 - 8:30	Breakfast
	8:30 - 9:30	Directed Evolution
Chair	D. Jancura	
	8:30 - 8:50	
SC6	G. Žoldák	<i>Mechanics and evolution of Hsp70</i>
	8:50 - 9:10	
SC7	M. Tomková , V. Dzurillová, E. Sedlák	<i>Directed evolution of a staphylokinase, a thrombolytic agent, by ribosome display technology</i>
	9:10 - 9:30	
SC8	V. Dzurillová , E. Sedlák	<i>Utilisation of HaloTag technology in directed evolution of haloalkane dehalogenase DhaA</i>
	9:30 - 9:50	Methods - Bioimaging
Chair	G. Bánó	
	P. Vagovič, J. Uličný	
ML2		<i>Bioimaging opportunities using X-FEL MHz tomography</i>
	9:50 - 10:20	Coffee break
	10:20 - 11:10	Plenary Lecture - Calcium Transport
Chair	M. Gaburjaková	
PL2	A. Zahradníková , B. Iaparov and I. Zahradník	<i>Structure-function relationships of the ryanodine receptor</i>
	11:10 - 12:10	Calcium Transport
Chair	A. Zahradníková Jr.	
	11:10 - 11:30	
SC9	B. Iaparov , I. Baglaeva, I. Zahradník and A. Zahradníková	<i>Mg²⁺ binding to RyRs moderates spontaneous calcium sparks</i>
	11:30 - 11:50	
SC10	J. Gaburjakova and M. Gaburjakova	<i>The cardiac ryanodine receptor provides a suitable pathway for the rapid transport of zinc (Zn²⁺)</i>
	11:50 - 12:10	
SC11	M. Májeková , V. Heger, L. Kisoová and Y. Rodríguez	<i>Interaction of ligands and calcium pump</i>
	12:10 - 13:15	Lunch
	13:15- 14:30	SkBS Awards Ceremony
Chair	A. Marček Chorvátová	
	13:15 - 13:30	
	Introduction of candidates	
	13:30 - 14:10	
AW1	I. Zahradník	<i>Pohyb obzoru na ceste za pochopením štruktúry a funkcie srdcovej svalovej bunky</i>
	14:10 - 14:30	
AW2	V. Subjakova , M. Tatarko , S. Mikulicova , S. Melikishvili and T. Hianik	<i>Application of nanoparticles modified by DNA aptamers in biosensing and targeted drug delivery</i>

	14:30 - 15:10	Aptamers & Nanostructures
Chair	Z. Gažová	
	14:30 - 14:50	
SC12	M. Tatarko , V. Šubjaková, M. Csiba, V. Oravczová, S. Spagnolo, J. Süle and T. Hianik	<i>Application of QCM-D for analysis of molecular interactions at surfaces</i>
	14:50 - 15:10	
SC13	A. Marček Chorvátová , M. Uherek, A. Mateašík and D. Chorvát	<i>Evaluation of the interaction of nano/microplastics with living organisms by microscopy methods</i>
	15:10 - 15:30	
SC14	V. Talafová , M. Humeník, G. Žoldák, T. Scheibel and E. Sedlák	<i>On the pH effect on self-assembly of the recombinant spider silk protein eADF4(C16) into nanofibrils</i>
	15:30 - 16:45	Coffee break served at Poster Session Poster Session II (all posters)
	16:45 - 17:45	General Assembly of the SkBS
Chair	A. Marček Chorvátová	
	16:45 - 18:00	Departure for dinner
	18:00 - 22:00	Conference dinner
Thursday, May 5, 2022		
	7:30 - 8:50	Breakfast
	8:50 - 9:30	Protein-Lipid Interactions
Chair	J. Uličný	
	8:50 - 9:10	
SC15	O. Ivankov, T. Murugova, T. Kondela, S. Kurakin, E. Ermakova, E. Dushanov, D. Badreeva, D. Soloviov, Kh. Kholmurodov, A. Kuklin and N. Kučerka	<i>Interactions within the lipid membranes mimicking preclinical conformational diseases</i>
	9:10 - 9:30	
SC16	M. Klacsová , B. Košáňová, J.C. Martínez and D. Uhríková	<i>SARS-CoV-2 antivirals inhibition effect on membrane fusion models</i>
Company presentation - Specion		
Chair	M. Cagalinec	
	9:30 - 9:50	
CP3	J. Golda and J. Tkáč	<i>Introducing the Next Generation in Protein Structure Determination - Microfluidic Modulation Spectroscopy</i>
	9:50 - 10:20	Coffee break

	10:20 - 11:10	Protein Aggregation
Chair	K. Štroffeková	
	9:50 - 10:10	
SC17	O. Cehlár , L. Hornáková, J. Šinský, S. Slušná, J. Galba, J. Piešťanský, A. Kováč, J. Hanes and R. Škrabana	
	<i>Interaction kinetics reveal distinct properties of conformational ensembles of three-repeat and four-repeat tau proteins</i>	
	10:10 - 10:30	
SC18	R. Skrabana , K. Rafajova, I. Jahodova, N. Zemanova, O. Cehlar, O. Bagarova	
	<i>Structural clues to different aggregation propensities of tau protein isoforms</i>	
	10:30 - 10:50	
SC19	V. Džupponová and G. Žoldák	
	<i>Aggregation mechanism and morphologies of myelomatic human light chain</i>	
	10:50 - 11:10	
SC20	M. Gancar , E. Kurin, Z. Bednarikova, J. Marek, P. Mucaji, M. Nagy and Z. Gazova	
	<i>Influence of herbal extracts' constituents on the amyloid aggregation of proteins</i>	
	11:40 - 11:50	Concluding remarks
	11:50 - 13:30	Lunch