PHYS-CHEM-BIO CONNECT PROGRAM (7 October 2025)

9:00 - 9:05		**Opening the Conference** -	**Jan Konvalinka**
9:05 - 9:10		-	**Michael Prouza**
Chair	**FZU**	**Martin Nikl**	
9:10 - 9:20	**FZU**	**Martin Cigl**	Self-organized materials for optical and optoelectronic aplications
9:20 - 9:30	**FZU**	**Prokop Hapala**	Computational design of nanofabrication of molecular computers
9:30 - 9:45	**IOCB**	**Michal Straka**	Fullerene molecular devices
9:45 - 10:00	**FZU**	**Mariana Klementová**	TEM analysis of nanomaterials
10:00 - 10:15	**FZU**	**Lukáš Palatinus**	Structure analysis by electron diffraction
10:15 - 10:30	**IOCB**	**Tomáš Kouba**	3D electron difraction of organic molecules: Towards the absolute structure
10:30 - 10:40	**FZU**	**Hana Lísalová**	Bio-functional antifouling polymer brush (nano-) coatings for biosensing and biomedical applications
10:40 - 11:10		**Coffee Break**	
Chair	**IOCB**	**Tomáš Slanina**	
11:10 - 11:20	**FZU**	**Barbora Špačková**	Label-free single-molecule microscopy
11:20 - 11:35	**IOCB**	**Václav Kašička**	Capillary electrophoresis - highly sensitive method for analysis and physicochemical characterization
11:35 - 11:45	**FZU**	**Oleg Lunov**	Role of physical factors in shaping cell fate
11:45 - 11:55	**FZU**	**Nadezhda M. Bulgakova**	Using lasers in biotechnologies and environmental sciences
11:55 - 12:10	**IOCB**	**Michal Hocek**	From base-modified to hypermodified nucleic acids
12:10 - 12:20	**FZU**	**Dario Cattozzo Mor**	Optical sensors and biosensors powered by plasmonic nanostructures
12:20 - 12:30	**FZU**	**Ján Lančok**	PVD as a tool to unloack of new generation of emerging materials for sensing and catalysis
12:30 - 13:45		**Lunch**	
Chair	**FZU**	**Antonín Fejfar**	
13:45 - 14:00	**IOCB**	**Petr Cígler**	Interface of nanoparticles for biomedical applications
14:00 - 14:10	**FZU**	**Michal Novotný**	Black metals potential in sensor application
14:10 - 14:20	**FZU**	**Zdeněk Hubička**	The deposition of oxide and sulfide semiconductor thin films by low-temperature plasma
14:20 - 14:35	**IOCB**	**Ivo Starý**	Expressing chirality in chemistry and physics
14:35 - 14:45	**FZU**	**Tomáš Jetmar**	From molecules to manufacturing: An exploration of chemical intersections with 3D-printing

14:45 - 14:55	**FZU**	**Štěpán Stehlík**	Engineering nanodiamond surfaces for biological and quantum sensing applications
14:55 - 15:10	**IOCB**	**Tomáš Slanina**	Light-activated reversible bonding and electron transfer
15:10 - 15:40		**Coffee Break**	
Chair	**IOCB**	**Ivo Starý**	
15:40 - 15:55	**IOCB**	**Jiří Kaleta**	Fotochemistry in 2-D systems
16:55 - 16:00	**FZU**	**Kateřina Kůsová**	Light-emitting silicon quantum dots
16:00 - 16:10	**FZU**	**Ondřej Kaman**	Complex magnetic studies of molecular systems: Magnetism, chirality, and high pressures
16:10 - 16:25	**IOCB**	**Tomáš Pluskal**	Decoding the chemical universe of plants
16:25 - 16:35	**FZU**	**Jiří Kroll**	Radiation hard semiconductor particle detectors
16:35 - 16:45	**FZU**	**Libor Juha**	The path from FLASH to SUPER-FLASH effects
16:45 - 16:50	**FZU**	**Sriram Sundaresan**	Dynamic spin and valence transitions: Insights from biology towards smart functional molecular materials
16:50 - 16:55	**FZU**	**Oleg Heczko**	New LHe liquifier at Troja as a joint enterprise of FZU, IOCB, and Matfyz
16:55 - 17:00	**FZU**	**P. Kratochvílová / A. Dejneka**	Radius Centre for Internships
17:00 - 17:05		**Closing of the Conference - Jan Konvalinka & Michael Prouza**	