

Cross-border seminar between Heyrovsky Institute and Helmholtz-Zentrum Dresden-Rossendorf (HZDR)

30th of May 2022

9:30	10:00	arrival to the J. Heyrovský Institute of Physical Chemistry, organizational issues, coffee	
10:00	10:10	Opening of the seminar by Director of the J. Heyrovský Institute Prof. Martin Hof and Prof. Sebastian Schmidt from HZDR	
10:10	10:35	lecture	Fingerprints of Strong Interaction between Transition Metal Dichalcogenides and Gold
			Matěj Velický
10:35	10:40	discussion	
10:40	11:05	lecture	Functionalization of graphene and graphene membranes
			Martin Kalbáč
11:05	11:10	discussion	
11:10	11:35	lecture	Intercalation into bi-layer graphene: insights from first-principles calculations
			Arkady V. Krasheninnikov
11:35	11:40	discussion	
11:40	12:05	lecture	Spatially resolved low fluence materials modification with the Helium Ion Microscope
			Gregor Hlawacek
12:05	12:30	discussion to end the session	
12:30	13:30	lunch	
13:30	13:55	lecture	Dynamics of proteins studied by fluorescence techniques
			Jan Sýkora
13:55	14:00	discussion	
14:00	14:25	lecture	Internal membrane protein hydration is linked to lipid lateral pressure
			Karim Fahmy
14:25	14:30	discussion	
14:30	14:55	lecture	Electron and photon collisions with molecules and clusters: from fundamentals to direct applications
			Juraj Fedor
14:55	15:00	discussion	
15:00	15:25	lecture	Molecular level studies of radiation interaction with matter
			Jaroslav Kočíšek
15:25	15:30	discussion	
15:30	16:00	coffee break	
16:00	16:25	lecture	(Opto-)electronic characterisation of encapsulated III-VI-semiconductors and black phosphorus
			Artur Erbe
16:25	16:30	discussion	
16:30	16:55	lecture	Ion beam modification and ion beam analysis for current materials research
			Stefan Facsko
16:55	17:00	discussion	
17:00	17:25	lecture	Digital Twins of Matter under Extreme Condition - Where Exascale meets AI
			Michael Bussmann
17:25	18:00	round table discussion	
18:00	21:00	dinner at Peperoncino	