

## GAČR 2020 – Approved projects

Principal investigator	Program	Beneficiary	Partner	Project title
Michal Hocek	EXPRO	ÚOCHB		Novel Functionalized (Bio)polymers Based on DNA Display of Small Molecules
Josef Michl	EXPRO	ÚOCHB	ÚFCH JH	Electrochemical Synthesis of Porphene
Martin Dračínský	STD	ÚOCHB		NMR crystallography of disordered systems
Petr Bouř	STD	ÚOCHB		Development of Chiral Spectroscopic Methods for Intermolecular Interaction Studies
Petr Beier	STD	ÚOCHB		Butenolides with neuroprotective effect from plant-derived smoke and their synthetic derivatives
Josef Cvačka	STD	ÚOCHB		The utility of atmospheric pressure gas-phase ionizations in mass spectrometry of peptides
Lubomír Rulíšek	STD	ÚOCHB		Fundamental Principles of Protein Folding and Protein-Ligand Interactions Revealed by High-Level Quantum Chemical Calculations
Jiří Kaleta	STD	ÚOCHB		Could light-driven molecular motors propel microscopic objects?
Irena G. Stará	STD	ÚOCHB		The synthesis and properties of polycyclic inherently chiral aromatics
Kvido Strisovsky	STD	ÚOCHB		Cellular and organismal roles of the intramembrane rhomboid protease RHBDL4
Lenka Maletínská	STD	ÚOCHB	FGÚ + MBÚ	Obesity, diabetes and neurodegeneration crosstalk: New therapeutic potential of prolactin releasing peptide analogs
Robert Hanus	STD	ÚOCHB	ČZU	Evolution of chemical communication in termites
Václav Kašička	STD	ÚOCHB	FGÚ	Affinity capillary electrokinetic methods for selective analysis of biopolymers and metabolites and for study of their interactions
Ota Bludský	STD	ÚOCHB	UPCE	Exploring Zeolites with Nanoscale Architecture: Synergy Between Experiment and Theory
Dominika Chalupská	STD	ÚEM	ÚOCHB	Delineating the mechanisms that regulate specific NMDA receptor subtypes in mammalian neurones
Eva Kudová	STD	FGÚ	ÚOCHB	Role of the cytoplasmic domain of the NMDA receptor for its biogenesis, function, and pharmacology: Focus on disease-associated mutations
Jakub Chalupský	JUN	ÚOCHB		Spectroscopic properties of molecules with complex electronic structure