



FACULTY OF
SCIENCE
Charles University

Department of Physical and Macromolecular chemistry

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Department of Physical and Macromolecular Chemistry
invites you for a seminar
and
a public habilitation lecture

Nanoscale organization of lipid membranes

Lecture hall CH 3, Faculty of Science, Hlavova 8, Praha 2

on April 13th, 2022 at 14:00

speaker: RNDr. Radek Šachl, Ph.D.

J. Heyrovský Institute of Physical Chemistry, Czech Academy of Sciences



Biochemical experiments performed more than 20 years ago suggested that plasma membranes of living cells are compartmentalized into small submicroscopic structures (nanodomains) having potentially relevant biological functions. Although this hypothesis has stimulated intensive research in many scientific disciplines, structural features of these nanodomains as well as their importance for the function of biological membranes remain elusive. What exactly are these nanodomains? And do they still exist in 2022?

In his habilitation lecture, Dr. Šachl will look for answers to these and other fundamental questions of membrane biophysics by introducing a powerful fluorescence microscopy technique MC-FRET developed in his laboratory. The speaker will show that this technique enabled characterization of various types of membrane nanodomains with unprecedented detail and significantly contributed to the current understanding of lipid nanodomains that are formed in simplified models of cellular membranes.

Organizers: Prof. Tomáš Obšil, Prof. Jiří Čejka, Dr. Jan Přech