FACULTY OF SCIENCE Charles University

Department of Physical and Macromolecular Chemistry invites you for a seminar Lecture hall CH 3, Faculty of Science, Hlavova 8, Praha 2 on December 1<sup>st</sup>, 2021 at 14:00

## Theoretical study of branched polyelectrolytes speaker: Mgr. Varvara Prokacheva

Finishing Ph.D. student, supervisor: Doc. RNDr. Filip Uhlík, Ph.D.



Branched polyelectrolytes are being extensively studied due to the wide range of their possible applications and interesting properties of their natural analogs.

This work is focused on the theoretical study of conformational transitions occurring in pH-responsive polyelectrolytes upon variation in pH, salt concentration or solvent quality. That can provide guidelines for the design of smart devices, for example, nanocarriers for drug delivery or desalination agents for water treatment applications.

## Theoretical investigation of soft matter: Representations and methods speaker: Mgr. Aleksandr Kazakov

Finishing Ph.D. student, supervisor: Doc. RNDr. Filip Uhlík, Ph.D.



It is desirable to have a deeper understanding of matter. There are very many representations and theoretical models in soft matter research.

Each representation brings its own benefits and drawbacks, thus it is essential to distinguish them and to use them appropriately. In this presentation I give an introduction to some of the methods and the insights I gained after their application to problems in soft matter research.

Seminar will be available via Zoom: <u>https://cuni-cz.zoom.us/j/94758328674</u> Organizers: Prof. Tomáš Obšil, Prof. Jiří Čejka, Dr. Jan Přech

Department of Physical and Macromolecular Chemistry Faculty of Science, Charles University, Albertov 6, Prague 2 128 44, Czech Republic

Head of Department: Prof. RNDr. Tomáš Obšil, Ph.D. obsil@natur.cuni.cz T: +420 221 951 289

IČO: 00216208 DIČ: CZ00216208