Mariya received her M.Sc. degree in Chemistry from **M.V. Lomonosov Moscow State University in 2006**. Her M.Sc. project on designing porous characteristics of zeolite catalysts was completed in the Laboratory of Kinetics and Catalysis headed by Prof. I.I. Ivanova.

She obtained her Ph.D. in Physical chemistry from **L.V. Pisarzhevskii Institute of Physical Chemistry (National Academy of Sciences of Ukraine) in 2013** focusing on tailoring active sites in extra-large pore zeolites.

Mariya spent one year as post-doctoral fellow in the **group of Prof. J. Čejka at J. Heyrovsky Institute of Physical Chemistry in Prague** studying structure-activity relationships of MOFs and layered zeolite catalysts in liquid phase reactions.

In 2014–2016 she continued her research work at J. Heyrovsky Institute leading the project granted by the Czech Science Foundation.

While working on her Ph.D. project, Mariya detected hydrolytic instability of germanosilicate zeolites, firstly considered as their disadvantage, but later on realized to be controllable and opening new opportunities for materials design. This finding has impacted the development of ADOR strategy for zeolites synthesis, which overturned conventional thinking about zeolite formation and led to the preparation of **15 new zeolites including "unfeasible" ones**. In 2017 Mariya (together with Prof. J. Čejka, Dr. P. Eliášová, Dr. J. Prech, Dr. M. Mazur, Dr. M. Opanasenko) has been **awarded with Werner von Siemens Award** for the contribution to the development of ADOR chemistry.

In 2017 Mariya was invited to join the nascent Charles University Centre of Advanced Materials (CUCAM) aimed at "developing the science and the human capital at Charles University" and accepted a position of Assistant Professor at Charles University. Mariya took this occasion to try herself in the role of student supervisor and lecturer.

Since joining Charles University, Mariya has been engaged in pedagogical activities, supervising/co-supervising Ph.D. (4), M.Sc. (1) and B.Sc. (4) students and co-lecturing courses "Zeolites and Molecular Sieves" and "Physical Chemistry for International Students". In 2020, Mariya contributed to design a new course "Catalysis in Practice" for BSc. and MSc. students. For her contribution to research and education at the Faculty of Science, she has been awarded with **the Dean's Award.**

Mariya co-authored **70 research papers** (including those in ACS Catal. and Chem. Soc. Rev., which are among **the top 1% papers "highly cited in the field of Chemistry"**).

For her research on porous materials and contribution to the design of zeolitic materials Mariya has recently been awarded with Learned Society of the Czech Republic Young Scientist Award and Neuron Prize for Promising Scientists.

Currently, Mariya is leading an independent research and team within the project "**ENforCE**" funded by the Ministry of Education, Youth and Sports.