

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. Currently, Mariya is leading an independent research and team within the **ERC_CZ project “ENforCE”** funded by the Ministry of Education, Youth and Sports of the Czech Republic. Her research is focused on developing synthesis routes for designing zeolite-based materials with tailored active sites and their application as catalysts for the synthesis of fine chemicals, and deep investigation of heterogeneous catalysts by *in situ* and *operando* FTIR spectroscopy.

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 been awarded with **Learned Society of the Czech Republic Young Scientist Award** and **Neuron Prize for Promising Scientists**.