



**doc. Ing. Kateřina Valentová, Ph.D.**

**Institute of Microbiology of the Czech Academy of Sciences**

**Czech Republic**

Kateřina Valentová studied General and Applied Biochemistry at the University of Chemistry and Technology in Prague (MSc., 2000) and in Medical Chemistry and Biochemistry at Palacký University in Olomouc (Ph.D. – 2004, Assoc. Prof. – 2012). She works in the field of biologically active (poly)phenolic compounds, their biological activity and biotransformation including their metabolism in the human body for about 20 years (12 years at the Faculty of Medicine and Dentistry of Palacký University in Olomouc, since 2013 at the Institute of Microbiology). She is (co)author of 79 publications, cited 2270×, h=26 (WOS, 29/07/2021).

Since 2021, K. Valentová is the head of the Laboratory of Biotransformation. The main competence of our group ( $\approx 30$  researchers and students) is biocatalysis and (bio)transformation of natural products. We have worked in the field of ergot alkaloids, but currently we focus mainly on flavonoids (silybin, quercetin and their derivatives) and chemoenzymatic syntheses of complex biologically active saccharides. In addition, we have important expertise in the (semi-)synthesis and modification of natural products, including biocatalytic synthesis, chiral discrimination and synthesis of metabolites. We mainly use lipases, glycosidases and nitrilases. We have an extensive library of about 200 enzymes, which we produce ourselves using our exclusive collection of microorganisms.