

Dr. Robert Mistrík  
Founder and CEO  
HighChem

Robert Mistrík received a Masters degree from the Slovak Technical University, Bratislava, Slovakia in 1991 and a Ph.D. from the University of Vienna, Austria in 1994. Between 1995 and 1997, he held a postdoctoral position at the National Institute of Standards and Technology, Gaithersburg, MD, USA working in the Mass spectrometry data center where he participated in the development of the famous NIST library. Back in Slovakia in 1998, he founded HighChem, Ltd., a privately owned company focused on analytical technologies, biomedical research and software development, and since then he has held the position of CEO. He is the founding developer of Mass Frontier software which has been licensed to more than 2,000 laboratories around the world, including leading pharmaceutical companies, prominent forensic agencies and environmental institutions. He is also a co-developer of SPLASH, a hashed identifier for mass spectra that was recently published in Nature Biotechnology. In 2009, he was awarded the Head of the Year prize, a national award for exceptional achievement in science and technology. Dr. Mistrík was a member of the scientific steering committee in the METAcancer consortium aiming to identify small molecule biomarkers in breast cancer tissue. In 2012, he was elected, and in 2014 re-elected, onto the Board of Directors of the international Metabolomics Society. In 2013 he initiated - and subsequently has led - the development of the mzCloud library, the world's largest database of LCMS mass spectra used for the identification of natural products, human endogenous metabolites, food additives, drugs of abuse, doping agents, environmental contaminants, and other important compound classes. Just as Google mapped and photographed the streets and terrain of our planet, in 2016 Dr. Mistrík and his team launched a project mapping and spectral fingerprinting the small molecules in the human body, which one day may help to decipher the molecular mechanisms of many diseases, potentially leading to the discovery of cures.