



Dr. Vadym Mochalin has received Ph.D. in Physical Chemistry from L. M. Litvinenko Institute of Physical Organic and Coal Chemistry, National Academy of Sciences of Ukraine and M.S. in Biochemistry (*cum laude*) from Donetsk National University, Ukraine. He is an expert in fundamental understanding and development of nanomaterials for various applications.

Over the past few years Dr. Mochalin has published more than 50 research papers in peer reviewed journals dealing with synthesis, characterization, purification, chemical modification, computational modeling, and applications of nanodiamond, MXenes, nanonions, graphene nanoscrolls, nanocarbons, and other nanomaterials for composites, energy storage, and biomedical applications.

Dr. Mochalin has been invited to write several book chapters and review articles, including the highly cited review on nanodiamond for Nature Nanotechnology and the first review on MXenes for 25th anniversary issue of Advanced Materials, and is an inventor on six international patents. He serves on the Editorial Board of Scientific Reports published by Nature Publishing Group. He is a member of American Chemical Society and Materials Research Society.

As Best in Class faculty in Enabling Materials for Extreme Environments, Dr. Vadym Mochalin will lead the development of this signature area in Chemistry at MS&T.