

Dr. Alexander S. Novikov born and raised in Moscow but at the age of 25 he fortunately moved to the most beautiful and relaxed city in Russia, St. Petersburg, where he lives and thrives to this day. He is a computational and quantum chemist and has huge experience in theoretical studies of catalytic reactions and organic transformations assisted by metal complexes, e.g., oxidation of hydrocarbons, nucleophilic addition, and cycloaddition processes (mechanisms, driving forces, kinetics, and thermodynamics), as well as properties of coordination and organometallic compounds (e.g., conformational isomerism and rotational barriers, properties of chemical bonds, orbital, and charge factors). His current research interests are mainly focused on supramolecular chemistry (in particular, involving coordination and organometallic compounds) and theoretical studies of unusual noncovalent interactions (e.g., hydrogen, halogen and chalcogen bonding, stacking, anagostic and metallophilic interactions, etc.), big data in chemistry and machine learning. His studies are interdisciplinary in nature and lie at the junction of computer modeling and IT with such natural science disciplines as chemistry, physics, crystallography, biology, and medicine, and have a direct bearing on the materials science and nanotechnology. Currently, Dr. Alexander S. Novikov works in Saint Petersburg State University, ITMO University, Lomonosov Moscow State University, Peoples' Friendship University of Russia named after Patrice Lumumba, and Sirius University of Science and Technology (he is delocalized like an electron). Also, Dr. Alexander S. Novikov's life has taken him around the Europe, Middle East and Central Asia, and he has worked extensively at various universities and scientific organizations outside of Russia as a researcher and/or professor: University of Lisbon and Technical University of Lisbon (Lisbon, Portugal), University of Jyväskylä and University of Oulu/Biocenter Oulu (Jyväskylä and Oulu, Finland), Uppsala University (Uppsala, Sweden), Friedrich Schiller University Jena (Jena, Germany), University of Oviedo (Oviedo, Spain), Istinye University and Hacettepe University (Istanbul and Ankara, Turkey), Karaganda Buketov University (Karaganda, Republic of Kazakhstan). Dr. Alexander S. Novikov's hobbies are psychology, history of Middle Ages, hiking, and surf.