RESEARCH INTERESTS

Hypervalent iodine chemistry: preparation of $ArI(OAc)_2$, $ArICl_2$ and $ArIF_2$ and their reactions with alkenes, alkynes, monoterpenes, ketones, arenes.
Synthetic organic chemistry: development of efficient synthetic methods and reagents for oxidation of alkenes, alkynes and ketones to 1,2-di- and polycarbonyl compounds, sultones, thiomethyl ethers.
Chemistry of terpenes: oxidation of natural terpenes by HBr-DMSO and $ArICl_2$ to chloro-, bromo- and iodohydrines, ketones, 1,2-diketones.
Chemistry and analysis of natural raw materials: composition of extracts, oleoresins, volatile oils, etc. from Siberian and Far East plants; synthesis of biologically active natural compounds.
Organofluorine Chemistry: syntheses of perfluoropolymers from perfluoroalcohols