

My research experience: biophysics of lipid-DNA, protein-DNA and DNA-low molecular ligands - interactions, water clusters structure studied by variety biophysics technique (CD, UV-VIS, FTIR, ESR-spectroscopy, fluorescent probe and spin-labeling, electrophoresis, immunoblotting, liquid and TLC-chromatography)

Research interests: nuclear membrane and nuclear pore assembly in vitro, water structure, neurobiochemistry (Alzheimer disease, animal model, aging, evolution and origin of life).

I can teach following series of lectures for students of you university: structure and functions of biological membranes, DNA-lipids and DNA -- membranes interactions and their role in nuclear envelope and pore complexes assembly. However I prefer work experimentally in this area, particularly in clearing of the role of DNA-lipids interactions in nuclear envelope assembly.

I has developed a way of getting pore complexes like nuclear pores in liposomes and should like to research their in more detail. I have idea to study DNA-lipids complexes using giant liposomes. There are ideas about role of this complexes in structure of chromosomes, nucleoids, and in genome expression.