

CURRICULUM VITAE

Name (First, Middle, Last): Vasily Vladimirovich Kuvichkin

Date of Birth: 14.01.1953

Nationality: Russian

Position: Senior Staff Scientists of Lab. of Mechanisms of Receptions, Institute of Cell Biophysics, Russian Academy of Sciences.

Address: Laboratory of Mechanisms of Receptions, Institute of Cell Biophysics, Russian Academy of Sciences, 142290, Pushchino, Moscow region, Russia.

Tel: 7-0967-735243

Fax: 7-0967-330509

E-mail: vkuv@rambler.ru, vkuvich@email.com

Educations and Positions:

1998- Senior Staff Scientists of Lab. of Mechanisms of Receptions, Institute of Cell Biophysics, Russian Academy of Sciences.

1997- 1998 Senior Staff Scientist of Laboratory of Physical Chemistry of Nucleic acids, Institute of Theoretical and Experimental Biophysics, Russian Academy of Sciences.

1995-1997 Senior Lecturer in Physics of Agrobiotechnological College of Pushchino

1992 Ph.D. Thesis Name: "Role of bivalent metal cations in the interactions of polynucleotides with organized phospholipids surfaces." Moscow, 1992.

1981-1994 Research Officer of Institute of Applied Microbiology, Obolensk, Moscow, Russia.

1978-1981 Postgraduate study: Dept. Embryology of The Moscow State University.,

1977-1978 Research fellow of The Institute of Biophysics of Academy of Sciences (USSR).

1970-1976 Graduate study: Department of Biophysics, Physical Faculty of the Rostov on the Don University.

List of publications of Dr. Kuvichkin V.V.

1. Alexandrova I.Yu., Kuvichkin V.V., Kashparov I.A., Medvinskaya N.I., Nesterova I. V., Samochin A.N., Bobkova N.V., (2004) Increased level of beta-amyloids in bulbectomised mice , Biochemistry (Russian), **69**, 218-224.
2. Kuvichkin V.V., Uteshev V.K., (2003) The role of lipid-nucleic acids interactions in nuclear envelope and pore complex assemblay Biophysics, **48(2)**, 125–131 .
3. Kuvichkin V.V., (2002) Lipid-nucleic acids interactions in vitro and in vivo, Bioelectrochemistry, **58**, 3– 12.
4. Kuvichkin V.V., (2002) DNA-membrane complexes, mitochondria and aging Bioelectrochemistry, **56(2)**, 189-193.
5. Zhdanov RI, Kuvichkin VV, Shmyrina AS, Jdanov AR, Tverdislov VA, (2002) Role of lipid membrane-nucleic acid interactions, DNA-membrane contacts and metal (II) cations in origination of initial cells and in evolution of prokaryotes to eukaryotes. Bioelectrochemistry. **58(1)**, 41-466.
6. Kuvichkin V. V., Novikov V. V., Alyushev F. K., Eremin S. M., Markov I. A., and Ten Yu. A. (2002) Effect of Modified Double-Distilled Water on the Conformational State of Bovine Serum Albumin: Fluorescence Spectroscopic Study. Biophysics, **46(1)**, 41–43.
7. Sukhorukov B.I., Petrov A.I., Kazarian R.L., Kuvichkin V.V., (2000) Formation of complexes between DNA and cationic amphiphile molecules by the fluorescent probe method.Biofizika. **45(2)**, 245-253.
8. Novikov V.V., Kuvichkin V.V., Novikova N.I., Fesenko E.E., (2000) Effect of weak magnetic fields on the capacity of various proteins and polyamino acids to form complexes with DNA. Biofizika. **45(2)**, 240-244.
9. Fesenko E.E., Novikov V.V., Kuvichkin V.V., Iablokova EV., (2000) Effect of treated with weak magnetic field aqueous salt solutions on the intrinsic fluorescence of bovine serum albumin. Isolation from solutions and partial characterization of the biologically active fluorescing fraction.Biofizika. **45(2)**, 232-239.
10. NovikovV.V., KuvichkinV.V., Fesenko E.E., (1999) Effect of Weak Combined Static and Low-frequency Alternating Magnetic Fields on the Intrinsic Fluorescence of Some Proteins in Aqueous Solutions. Biophysics, **44**, 265-269.
11. Novikov V.V., Kuvichkin V.V., Fesenko E.E., (1999) Effect of weak combined low frequency constant and alternative magnetic fields on intrinsic fluorescence of proteins in aqueous solutions.Biofizika. **44(2)**, 224-230.

12. Kuvichkin V.V., Emeljanenko V.I., Kuznetsova S.M., Zhdanov R.I., Petrov A.I. (1999) Calorimetric study of the complexes: polyA*polyU -phosphatidylcholine liposomes-Mg++. *Biophysics*, **44**, 386-394.
13. Zhdanov R.I., Kuvichkin V.V., (1998) Role of DNA-membrane interactions in prokaryote-to-eukaryote transition: an hypothesis. *Cytobios*. **96(383)**, 151-156. 14.
14. Zhdanov R.I., Volkova L.A., Kuvichkin V.V., Petrov A.I., (1994) Nucleic Acid Spin Labeling Study of Interaction between polyadenylic acid: polyuridilic acid duplex and egg phosphatidylcholine vesicles. *Appl. Magn. Res.*, **7**, 115-130.
15. Zhdanov R.I., Kuvichkin V.V. (1993) Membrane phospholipids act as DNA/RNA receptors during formation of specific DNA-nuclear membrane contacts and gene expression. *NEW DEVELOPMENT IN LIPID-PROTEIN INTERACTIONS AND RECEPTOR FUNCTION* (Gustafson J.A. and Wirtz k.W.A., eds.), Plenum, New York, pp.249-262
16. Kuvichkin VV. (1990) Ultrastructural study of DNA--liposomes--Mg²⁺ complexes. *Biofizika*. **35(2)**, 256-62.
17. Kuvitchkin V.V. (1990) Investigation of the complexes DNA- phosphatidylcholine liposomes-Mg++. *Eur. J. Cell. Biol.*, **123**, 34.
18. Kuvichkin V.V., Volkova L.A., Naryschkina E.P., Isangalin F.Sh. (1989) ESR-study of complexes DNA- PC-liposomes-Mg++. *Biophysics*, **34**, 405- 409.
19. Kuvichkin VV, Sukhomudrenko AG. (1987) Interaction of natural and synthetic polynucleotides with liposomes in the presence of divalent cations. *Biofizika*. **32(4)**, 628-633.
20. Kuvichkin VV. (1983) Theoretical model of DNA-membrane contacts. *Biofizika*. **28(5)**, 771-775.
21. Sukhorukov B.I., Kuvichkin V.V., Shabarchina L.I., (1982) Structure and functional peculiarities of DNA-membrane contacts. *Studia biophysica*, **87**, 256- 266.
22. Sukhorukov B.I., Kuvichkin V.V., Shabarchina L.I., (1980) Structure and function of DNA-membrane contact in cells. *Biofizika*. **25(2)**, 270-275.
23. Shabarchina L.I., Sukhorukov B.I., Kuvichkin V.V., (1979) Infrared spectroscopic study of DNA--lipid interactions. DNA compacting on disperse particles. *Biofizika*, **24(6)**, 990-998.