CURRICULUM VITAE
Nataliya V. Roznyatovskaya, Ph.D.

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Personal: *Born*: December 27, 1979 (Moscow)
Citizenship: Russian
Family state: unmarried

Education:

2002 *Diploma in Chemistry* from Moscow State University, Chemical Faculty, Department of Chemical Enzymology. Approved by US World Education Service as *Master of Science (M. S.) with specialization in Physical Chemistry of Enzymes.*
Supervisor – Prof. A.D. Ryabov from Moscow State University, Dept. of Chemical Enzymology.
Diploma subject: "Polypyridine homo- and heterobinuclear complexes of ruthenium and osmium: artificial substrates of glucose oxidase"

2005 *Ph.D. in Electrochemistry*; supervisor - Prof. G. A. Tsirlina from Moscow State University, Chemical Faculty, Dept. of Electrochemistry.
Thesis: "Electroreduction of binuclear copper(II) and nickel(II) Robson-type complexes associated with protonation"

Additional Courses

2001 Biotechnology and Molecular biochemistry (Moscow State University, Dept. of Chemical Enzymology)
1998-2000 *Certificate of successful examinations on pedagogy and general, social and age-specific psychology* (from Department of Pedagogic Training of Moscow State University)

Employment:

1997-2002 Student; Moscow State University, Chemical Faculty

2002-2005 Ph.D. Student, since 7.2005 – Research associate; Moscow State University, Chemical Faculty, Dept. of Electrochemistry, Lab. of Electrocatalysis and corrosion, (Prof. O.A. Petrii)

7.2005-11.2005 DAAD (German Academic Exchange Service) Fellowship postgraduate student; Institut of Analytical Chemistry, Chemo- und Biosensorik, University of Regensburg (Prof. Otto Wolfbeis), group "Thin film electrochemical chemo- and biosensors" (Dr. Dr. Habil. Vladimir Mirsky) since 12.2005 Research associate; Moscow State University, Chemical Faculty, Dept. of Electrochemistry, Lab. of Electrocatalysis and corrosion, (Prof. O.A. Petrii)

Languages English (fluent), French (fluent, *Certificate of attainments in the field of French regional geography* from Moscow University French College, 2002-2003), German (basics), Russian (native)

Main research experience

- Development and characterization of new effective artificial redox mediators based on metalloorganic compounds for oxidoreductases (glucose oxidase, horseradish peroxidase)
- Kinetics study of redox reactions catalyzed by enzymes with artificial mediators (UV-vis spectroscopy, cyclic voltammetry, potential step coulonometry)
- Electrochemical study of redox systems by various voltammetric techniques
- Immobilisation of redox active metal complexes onto electrode surfaces, electropolymerization and electrodes modification
- Adsorption study and electrode surface modification by thiols, polymers, proteins (Surface plasmon resonance (SPR))

Professional membership

- Refereeing of papers in *Russian Journal of Electrochemistry*.
- Member of International Society of Electrochemistry (ISE)

Publications

Conference Proceedings

1. 54th Annual Meeting of the International Society of Electrochemistry, SanPaulo, Brasil, 2003
   N.V. Roznyatovskaya*, G.A. Tsirlina, V.V. Roznyatovskii, M.D. Reshetova, Yu.A. Ustynuyk

2. International conference dedicated to 50th anniversary of INEOS, Moscow, Russia, 2004
   N.V. Roznyatovskaya*, V.V. Roznyatovskii

3. 55th Annual Meeting of the International Society of Electrochemistry, Thessaloniki, Greece, 2004
   N.V. Roznyatovskaya*, S.Yu. Vassiliev, A.I. Yusipovich, G.A. Tsirlina

4. the 9th V.A. Fock Meeting on Quantum and Computational Chemistry, Novgorod, Russia, 2005
   D.V. Gloukhov*, R.R. Nazmutdinov, N.V. Roznyatovskaya, G.A. Tsirlina

5. International student conference "Lomonosov-2005", Moscow, Russia, 2005
   N.V. Roznyatovskaya*

6. Workshop of Institute of Analytical Chemistry Chemo- and Biosensors (Regensburg), Grado, Italy, 2005
   N.V. Roznyatovskaya*

Articles

1. *Journal of Organometallic Chemistry, 668, (2003), p. 83-90*
   J. Razumiene, A. Vilkanauskyte, V. Gureviciene, V. Laurinavicius, N. V. Roznyatovskaya, Y. V. Ageeva, M.D. Reshetova, A.D. Ryabov

"New bioorganometallic ferrocene derivatives as efficient mediators for glucose and ethanol biosensors based on PQQ-dependent dehydrogenases"

2. *Journal of Biological Inorganic Chemistry, 8, (2003), p. 815-822*
A.D. Ryabov, N.V. Roznyatovskaya, K. Suwinska, M. Revenko, A.Y. Ershov
"Dinuclear versus mononuclear ruthenium(II) and osmium(II) complexes
as potent mediators of glucose oxidase; crystal structure of $[OsCl(4,4'\text{-bpy})(bpy)_2]BF_4$"

3. *Russian Journal of Electrochemistry, 40(9), (2004), p. 955-962*
N.V. Roznyatovskaya, G.A. Tsirlina, V.V. Roznyatovskii, M.D. Reshetova, Yu.A. Yustinyuk
"Electroreduction of a Binuclear Macrocyclic Complex of Copper(II) of the Robson Type in Aqueous Solutions"

4. *Journal of Solid State Electrochemistry, 9(8), (2005), p. 581-589*
N.V. Roznyatovskaya, S.Yu.Vassiliev, A.I. Yusipovich, G.A. Tsirlina, V.V. Roznyatovskii
"Aqueous electrochemistry of binuclear copper complex with Robson-type ligand:
dissolved versus surface-immobilized reactant"

5. *Mendeleev Communications, 15(3), (2005), p. 93-95*
N.V. Roznyatovskaya, G.A. Tsirlina, V.V. Roznyatovskii, A.S. Mitiaev, Y.D. Smurnyy
"Binuclear copper(II) and nickel(II) macrocyclic complexes:
the key role of central ion in hydrogen peroxide electrocatalysis"