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29 years

Curriculum Vitae

Born: May 07, 1980; Rybinsk, Yaroslavl region, Russia.

Residence: Kharkov, Ukraine.

Citizenship: Ukraine.

Affiliation: Department of Chemical Metrology, V.N. Karazin Kharkov National University, <http://www-chemistry.univer.kharkov.ua/khm>

Position: 2006- 2010 – **Senior Lecturer, Researcher** at the Department of Chemical Metrology

Education: 1997- 2002 – V.N. Karazin Kharkov National University, student, specialization at the Department of Chemical Metrology.
2002-2005 – V.N. Karazin Kharkov National University, Ph. D. student, Department of Chemical Metrology.

Degrees: **2002** – Master of chemistry at the V.N. Karazin Kharkov National University, advisor – Ph. D. Elena. A. Reshetnyak Ph. D. thesis: *“The evaluation of metrological characteristics of test-determinations on the basis of reagent indicator paper”*

2006 – Ph. D. in analytical chemistry at the V.N. Karazin Kharkov National University, advisor – Ph. D. Elena. A. Reshetnyak Ph. D. thesis: *“Test-methods of chemical analysis with visual indication: metrological assurance, new test-systems”*.

Language capabilities:

Russian and Ukrainian – native;

English – read and translate – fluent; speak – satisfactorily.

Awards and Scholarships:

- Scholarship named N. Beketov to young scientists from Kharkov Regional public administration, 2007.
- Research grant from Fund of fundamental, applied and searching research works of V.N. Karazin Kharkov National University, *Supervisor of the project: “Instrumentalization of quantitative determinations in test analysis and thin layer chromatography and chromaticity of multitest”* (2007).

Participation in research works supported by Ministry of Sciences and Education of Ukraine:

- ✓ Control of chemical equilibria in heterogeneous and microheterogeneous media promising for test and hybrid methods of analysis (No. 0103U004212) **(2003-2005)**.
- ✓ Control of processes at the interface and optimizations of experimental conditions in hybrid methods of analysis (No. 0106U003109) **(2006-2008)**.
- ✓ Chemometrics grounds of structure-retention-property relationships (No. 0107U000659) **(2009)**;
- ✓ Nanostructured silica and organosilica materials for chromatography and test analysis (No. 0109U001310) **(2010)**.

Supervisor of qualification work:

- ✦ **B. Sc. Temnohyud T.** “Complexing properties of Eriochromcyanin R, immobilized in gelatinous film” (2008);
- ✦ **M. Sc. Temnohyud T.** “Nitroso-R-Salt as reagent for test determination Cobalt, Nickel, Copper, Iron in water” (2009);
- ✦ **M. Sc. Dyudchenko S.** “Test-systems for determination of Calcium and Magnesium” (2009).

Cooperation:

- ✦ **Prof. V.M. Ostrovskaya**, Institute of general and inorganic chemistry Russian Academy of Science.

Research interests:

test-analysis: creation of new test-systems for environmental contaminations checking; estimation of metrological performance of test-methods techniques with visual indication (detection and determination limits, selectivity, additivity of multitests, errors of determination); colour scales.

equilibria investigation: complex formation, complex stability, composition of complex in homo and heterogeneous medium; protolytic equilibria in heterogeneous and self-organized medium.

Most important publications:

Book

1. Yu.V. Kholin, **N.A. Nikitina**, A.V. Panteleimonov, E.A. Reshetnyak, A.A. Bugaevskii, L.P. Loginova, Metrological characteristics of detection procedure with binary response. – Kharkov: Timchenko, 2008. 128 p.

Articles

1. A.V. Panteleimonov, **N.A. Nikitina**, E.A. Reshetnyak, L.P. Loginova, A.A. Bugaevskii, Yu.V. Kholin Binary response procedures of qualitative analysis: metrological characteristics and calculation aspects // Methods and objects of chemical analysis – 2008. – Vol. 3. № 2. – P. 128-146.
2. V. M. Ostrovskaya, A. V. Tsygankov, O. A. Prokopenko, A. K. Buryak, E. A. Reshetnyak and **N. A. Nikitina** Determination of nitrite ions using test

- strips based on 3-hydroxy-7,8-benzo-1,2,3,4-tetrahydroquinoline // Journal of analytical chemistry – 2008. – Vol. 63. № 8. – P. 792-798. (Translated from Zhurn. Analyt. Khimii. – 2008. – Vol. 63. № 8. – P. 866-872).
3. Reshetnyak E.A., **Nikitina N.A.**, Loginova L.P., Ostrovskaya V.M. Limit of detection in test methods of analysis with visual indication: affecting factors // Journal of analytical chemistry – 2005. – Vol. 60. № 10. – P. 982-989. (Translated from Zhurn. Analyt. Khimii. – 2005. – Vol. 60. № 10. – P. 1102-1109).
 4. E.A. Reshetnyak, **N.A. Nikitina**, L.P. Loginova, N.O. Mchedlov-Petrosyan, N.V. Svetlova The protolytic and complex forming properties of indicators in the gelatinous gel medium // Kharkov University Bulletin – 2005. – №669. Chemical Series. Issue 13 (36). – P. 67-82.
 5. V.M. Ostrovskaya, E.A. Reshetnyak, **N.A. Nikitina**, A.V. Panteleimonov, Yu.V. Kholin A Test Method for Determining Total Metals with an Indicator Paper and Its Performance Characteristics // J. Anal. Chem. – 2004. – Vol. 59. № 10. – P. 995-1001 (Translated from Zhurn. Analyt. Khimii. – 2004. – Vol. 59. № 10. – P. 1101-1108).
 6. E.A. Reshetnyak, **N.A. Nikitina**, Yu.V. Kholin, N.V. Svetlova, V.M. Ostrovskaya Metrological characteristics in test-analysis: reliable estimates // Kharkov University Bulletin – 2003. – №596. Chemical Series. Issue 10 (33). – P. 90-98.

Thesis of reports

1. Reshetnyak E.A., Mchedlov-Petrosyan N.O., **Nikitina N.A.**, Svetlova N.V. The protolytic properties of indicators embedded in the gelatinous gel // «Modern physical chemistry for advanced materials» — Kharkov. — 2007. — P. 293-295.
2. Reshetnyak E.A., Loginova L.P., Mchedlov-Petrosyan N.O., **Nikitina N.A.**, Svetlova N.V. Indicators immobilized in gelatinous gel as test tools // Book of abstracts. «International Congress on Analytical Sciences» — Moskow. — 2006. — P. 336.
3. **Nikitina N.A.**, Reshetnyak E.A., Loginova L.P. Test analysis: new systems and metrological providing // Book of abstracts. International conference AC&CA. – Kyiv. – 2005. – P. 307.