

# Contents

**Vol. 84, No. 13, 2014**

A simultaneous English language translation of this journal is available from Pleiades Publishing, Ltd.  
Distributed worldwide by Springer. *Russian Journal of General Chemistry* ISSN 1070-3632

Eutrophication of Water Bodies – A Global Environmental Problem <i>G. T. Frumin and I. M. Gildeeva</i>	2483
Practical Application of Galvanotaxis of Ciliated Protozoan Cells to Automation of Acute Toxicity Assay <i>A. V. Popov, D. O. Vinokhodov, and M. V. Rutto</i>	2489
Conditions and Mechanisms of the Transformation of Gibbsite into Taranakite in Phosphate Solutions <i>A. Yu. Kudayarova, T. V. Alekseeva, and E. I. Elfimov</i>	2499
Ion Exchange of Copper(II), Lanthanum(III), Thallium(I), and Mercury(II) on the “Polysurmin” Substance <i>M. A. Sinyakova, E. A. Semenova, and O. A. Gamuletskaya</i>	2516
Multi-Year Variability of Organic Matter Content in Water of Rybinsk Reservoir <i>E. M. Bukbulatova and I. E. Stepanova</i>	2521
Estimation of the Trophic Status of Selected Kazakhstan Lakes <i>G. T. Frumin and Yu. V. Krashanovskaya</i>	2527
Enhancement of the Electrokinetic Remediation Method of Fine-Dispersed Clay Soils <i>L. L. Lysenko</i>	2532
Preparation of Complex Nitric Fertilizers During Recycling of Acidic Wastes of Detonation Nanodiamonds Purification Stage <i>I. V. Shugalei, M. A. Ilyushin, and A. M. Sudarikov</i>	2539
Bioaccumulation of Heavy Metals with Environmental Objects and Assessment of Health Risks (the Former Mining Enterprise Khingansky GOK as an Example) <i>L. T. Krupskaya and V. P. Zvereva</i>	2542
Application of Ion-Exchange Materials with High Specific Surface Area for Solving Environmental Problems <i>M. K. Rustamov, D. A. Gafurova, M. M. Karimov, N. M. Rustamova, D. Zh. Bekchonov, and M. G. Mukhamediev</i>	2545
Reactions of Unsaturated Surfactants with Methylethanolamine in the Model Oil–Water System <i>G. S. Simonian and G. P. Pirumyan</i>	2552
Mycotoxins as Dangerous Environmental Factors and a New Way of Their Treatment, Including the Use of Nanomaterials <i>I. V. Shugalei, M. A. Ilyushin, A. M. Sudarikov, and Z. V. Kapitonenko</i>	2555
Elemental Composition and Structural Peculiarities of Humic Acids in Bog Waters of Taiga Zone <i>T. T. Efremova, S. P. Efremov, N. I. Pavlenko, and N. G. Maksimov</i>	2562
Humic Substances and Their Role in Migration of Metals in the High Colored Surface Waters: The Case Study of Rivers of the Pripyat’ River Basin <i>P. N. Linnik, V. A. Zhezherya, Ya. S. Ivanechko, and R. P. Linnik</i>	2572
Research of Demanganation Process of Artesian Well Water <i>A. V. Perfilov, A. Yu. Chirikov, Yu. M. Badulin, A. A. Yudakov, and V. V. Slesarenko</i>	2588
Background Nitrogen Concentrations in the Unmonitored and Partially Monitored Rivers of the Gulf of Finland Basin <i>E. V. Stepanova and G. T. Frumin</i>	2592
Effect of Hydration and Air Exposure on Sorption Properties and Phase Composition of Calcium Silicate Hydrate <i>P. S. Gordienko, S. B. Yarusova, A. P. Suponina, A. A. Yudakov, and I. G. Zhevtun</i>	2596

Study of the Composition of Volatile Organic Compounds Emitted by the Filamentous Fungus <i>Fusarium Culmorum</i> by Gas Chromatography-Mass Spectrometry Combined with Solid Phase Microextraction <i>E. I. Savel'eva, O. P. Gavrilova, and T. Yu. Gagkaeva</i>	2603
The Method of Aluminothermic Neutralization and Recycling of Copper Electroplating Sludge <i>A. Yu. Chirikov, V. P. Reva, A. A. Yudakov, and A. V. Perfilov</i>	2611
Environmental Monitoring of Ecosystems under the Impact of Gold and Tin Mining Wastes in the Far Eastern Federal District <i>L. T. Krupskaya, V. P. Zvereva, M. B. Bubnova, E. A. Chumachenko, and D. A. Golubev</i>	2616
Ensuring of Environmental Safety in the Reclamation of Anthropogenic Placer Gold Deposits in the North of Khabarovsk Krai <i>O. O. Panfilov, D. A. Golubev, L. T. Krupskaya, V. A. Morin, and K. E. Gula</i>	2624
Lignin Wastes: Past, Present, and Future <i>S. M. Krutov, A. P. Voznyakovskii, I. V. Gribkov, and I. V. Shugalei</i>	2632
Physicochemical Modeling of the Effect of Mine Waters from Polymetallic and Cassiterite-Sulfide Deposits of Dalnegorskii Region on the Hydrosphere <i>V. P. Zvereva, E. A. Yastremskaya, and A. I. Lysenko</i>	2643
Microbial-Plant Interactions in the Prevention of Environmental Risks <i>A. E. Gabidova and V. A. Galynkin</i>	2650
Kinetics Laws of Nitrification in Rybinsk Reservoir Waters <i>I. E. Stepanova</i>	2656
Investigation of Stability and Composition of the Conversion Products of Russian Poisonous Substance VX in Aqueous Media <i>E. I. Savel'eva and L. K. Gustyleva</i>	2660
Directions of Practical Application of Mycelial Wastes of Microbiological Production of Antibiotics in Various Areas of Industry and Agriculture (Review) <i>V. V. Belakhov and A. V. Garabadzhiu</i>	2664
Method for Comparison of the Maximum Range of Chemical Pollutants <i>S. Ketin, S. Sacirovic, S. Plojovic, R. Skrijelj, and R. Biocanin</i>	2677

---