

BIRTHDAYS AND ANNIVERSARIES

MARINA ABRAMOVNA YUROVSKAYA

A. V. Karchava, F. V. Zaitseva, and A. A. Ovcharenko



Professor Marina Abramovna Yurovskaya celebrated her Jubilee on March 1, 2000. Prof. Yurovskaya is an outstanding authority in heterocyclic chemistry. She is a member of the Editorial Board and regional editor of *Khimiya Geterotsiklicheskikh Soedinenii* (Chemistry of Heterocyclic Compounds) and is a Chemical Sciences Doctor.

Prof. Yurovskaya's entire life has been related to the Chemical Faculty of M. V. Lomonosov Moscow State University and, in particular, with the Laboratory of Biologically Active Compounds founded by Prof. A. N. Kost, in which she has worked from its inception in 1969 after defending her Chemical Sciences Candidate's Dissertation. In 1990, she defended her Chemical Sciences Doctoral Dissertation and was granted the academic title of Professor in 1997.

The chemistry of nitrogen heterocyclic compounds, in particular, indole and pyridine, has been the major area of research of Prof. Yurovskaya. Under the direction of Prof. A. N. Kost, she carried out basic research on the pyridylethylation of heterocyclic compounds, synthesis and structural investigation of indole series intramolecular charge-transfer complexes, and the synthetic applicability of 1,2,3,4-tetrahydro- γ -carboline iodomethylates. Prof. Yurovskaya has developed an industrial process for the manufacture of Dimebon, an antihistamine used in medical practice.

Later studies of Prof. Yurovskaya have been related to the study of the three-dimensional structure and chemical transformations of 3-acylindoles and their oximes and the synthesis and nucleophilic transformations of 1-alkyl-3-nitropyridinium salts.

Translated from *Khimiya Geterotsiklicheskikh Soedinenii*, No. 3, pp. 423-426, March, 2000.

Among her achievements, Prof. Yurovskaya has developed an original method for synthesizing tryptamine derivatives using 3-pyridylethylation of indole and subsequent hydrolysis of the N-2-(3-indolyl)ethylpyridinium salt. Special distinction is found for the series of studies of Prof. Yurovskaya and her co-workers on the transformations of 1-alkyl-3-nitropyridinium salts and a fundamentally new method for the synthesis of alkylindoles. Recent studies have expanded the scope of this reaction to the preparation of optically-active functional derivatives of indole.

The scientific work of Prof. Yurovskaya has been repeatedly noted by the government of the Russian Federation, International Science Fund, and Lomonosov Lectures at M. V. Lomonosov Moscow State University.

Prof. Yurovskaya is well known to virtually all the frequent authors contributing to *Khimiya Geterotsiklicheskikh Soedinenii*, in which she has participated in the past 30 years.

We, the students and colleagues of Prof. Yurovskaya, extend hearty congratulations on her birthday and wish her good health and further scientific success.

PUBLICATIONS OF PROF. YUROVSKAYA

Major Research Publications

1. A. N. Kost, M. A. Yurovskaya, T. V. Mel'nikova, and O. I. Potanin, "Pyridylethylation of the NH group in indole compounds", *Khim. Geterotsikl. Soedin.*, No. 2, 207 (1973).
2. A. N. Kost, M. A. Yurovskaya, A. B. Belikov, and P. B. Terent'ev, "Fine structure of 9-[2-(2-methyl-5-pyridyl)-ethyl]-1,2,3,4-tetrahydro- α -carbolines", *Khim. Geterotsikl. Soedin.*, No. 9, 1050 (1973).
3. M. A. Yurovskaya, A. N. Kost, P. B. Terent'ev, A. V. Belikov, and L. A. Sviridova, "The behavior of intramolecular charge-transfer complexes under electron impact", *Tetrahedron*, **34**, 2931 (1978).
4. M. A. Yurovskaya and I. L. Rodionov, "Reaction of 1,2,3,4-tetrahydro- γ -carbolines with nucleophilic reagents", *Khim. Geterotsikl. Soedin.*, No. 8, 1072 (1981).
5. M. A. Yurovskaya, V. V. Druzhinina, V. A. Budylin, Yu. G. Bundel', D. S. Yufit, and Yu. T. Struchkov, "Structure of 3-acylindole oximes", *Khim. Geterotsikl. Soedin.*, No. 2, 226 (1983).
6. M. A. Yurovskaya, V. V. Druzhinina, M. A. Tyurekhodzhaeva, and Yu. G. Bundel', "Synthesis of O-vinyl ethers of 3-acylindole oximes and their heterocyclization to pyrroloindoles", *Khim. Geterotsikl. Soedin.*, No. 1, 69 (1984).
7. M. A. Yurovskaya, V. A. Chertkov, A. Z. Afanas'ev, F. V. Ienkina, and Yu. G. Bundel', "Synthesis of indoles from pyridinium salts. Recyclization of 4-alkyl-2,6-dimethyl-3-nitropyridinium iodomethylates in the presence of ketones", *Khim. Geterotsikl. Soedin.*, No. 4, 509 (1985).
8. M. A. Yurovskaya, A. Z. Afanas'ev, V. A. Chertkov, E. M. Gizatullina, and Yu. G. Bundel', "Synthesis of indoles from 3-nitropyridinium salts. Use of ketimines in the synthesis of indoles from 3-nitropyridinium salts", *Khim. Geterotsikl. Soedin.*, No. 12, 1625 (1987).
9. M. A. Yurovskaya, A. N. Kost, and A. S. Vyazgin, "New synthesis of tryptamines", in: *Chemistry and Biological Activity of Nitrogen Heterocycles* [in Russian], Division of Institute of Chemical Physics, Academy of Sciences of the USSR, Chernogolovka (1989), p. 184.
10. M. A. Yurovskaya, A. V. Karchava, A. Z. Afanas'ev, and Yu. G. Bundel', "Synthesis of indoles from 3-nitropyridinium salts. N-Methylimine of methyl ethyl ketone in the indolization of 1-methyl-3-nitropyridinium salts", *Khim. Geterotsikl. Soedin.*, No. 4, 489 (1992).
11. M. A. Yurovskaya, A. Z. Afanasiev, F. V. Maximova, and Yu. G. Bundel', "Scheme of transformation of 3-nitropyridinium salts into indoles", *Tetrahedron*, **49**, 4945 (1993).
12. A. V. Karchava, M. A. Yurovskaya, T. R. Wagner, B. L. Zybailov, and Yu. G. Bundel', "Indoles from 2-nitropyridinium salts: a new route to chiral indoles and indolines", *Tetrahedron: Asymmetry*, **6**, 2895 (1995).

13. A. A. Ovcharenko, V. A. Chertkov, A. V. Karchava, and M. A. Yurovskaya, "Cycloaddition reaction of 1-(4-nitrophenyl)-3-phenylnitrile ylide to buckminsterfullerene[60]", *Tetrahedron Lett.*, **38**, 6933 (1997).
14. S. A. Yamashkin and M. A. Yurovskaya, "Cis-trans isomerization of indolydeneaminocarbonyl compounds", *Khim. Geterotsikl. Soedin.*, No. 10, 1336 (1999).
15. V. A. Chertkov, S. V. Zubkov, A. A. Ovcharenko, A. V. Karchava, and M. A. Yurovskaya, "Determination of the hyper-long-range coupling constants using complete line shape analysis in the ¹H NMR spectra of cycloadducts of fullerene C₆₀ with 1-(4-nitrophenyl)-3-phenylnitrilide", *Khim. Geterotsikl. Soedin.*, No. 11, 1500 (1999).
16. S. A. Yamashkin and M. A. Yurovskaya, "Synthesis of some nitro- and aminoindoles", *Khim. Geterotsikl. Soedin.*, No. 12, 1630 (1999).
17. O. D. Mit'kin and M. A. Yurovskaya, "Quaternization of electron-deficient pyridines containing two electron-withdrawing substituents", *Khim. Geterotsikl. Soedin.*, No. 1, 53 (2000).

Review Articles

1. A. N. Kost, M. A. Yurovskaya, and F. A. Trofimov, "Tetrahydro-γ-carbolines", *Khim. Geterotsikl. Soedin.*, No. 2, 291 (1973).
2. M. A. Yurovskaya, "Synthesis of alkylindoles", *Khim. Geterotsikl. Soedin.*, No. 9, 1155 (1987).
3. M. A. Yurovskaya and A. Z. Afanas'ev, "Methods for the synthesis of 3-nitropyridines", *Khim. Geterotsikl. Soedin.*, No. 7, 867 (1991).
4. V. I. Terenin, E. V. Babaev, M. A. Yurovskaya, and Yu. G. Bundel', "New reactions and transformations of azines", *Khim. Geterotsikl. Soedin.*, No. 6, 792 (1992).
5. M. A. Yurovskaya and A. V. Karchava, "Functionalization of pyridines. Reactions with formation of a carbon-carbon bond", *Khim. Geterotsikl. Soedin.*, No. 11, 1488 (1993).
6. S. A. Yamashkin, N. Ya. Kucherenko, and M. A. Yurovskaya, "Reactions of acetylacetone with aryl- and hetarylamines", *Khim. Geterotsikl. Soedin.*, No. 5, 579 (1997).
7. M. A. Yurovskaya, O. D. Mit'kin, and F. V. Zaitseva, "Functionalization of pyridines. Synthesis of acylpyridines, pyridinecarboxylic acids, and their derivatives", *Khim. Geterotsikl. Soedin.*, No. 8, 1013 (1998).
8. M. A. Yurovskaya and A. A. Ovcharenko, "1,3-Dipolar cycloaddition as a method for the synthesis of fullerene C₆₀ derivatives containing heterocyclic fragments", *Khim. Geterotsikl. Soedin.*, No. 3, 291 (1998).
9. M. A. Yurovskaya and A. V. Karchava, "Stereoselective reduction of endocyclic carbon-nitrogen double bonds. Application to biomolecular synthesis", *Tetrahedron: Asymmetry*, **9**, 3331 (1998).
10. M. A. Yurovskaya and O. D. Mit'kin, "Functionalization of pyridines. Reactions with formation of a bond between carbon and group IV, V, or VI heteroatom", *Khim. Geterotsikl. Soedin.*, No. 4, 437 (1999).

The editors of this Journal heartily congratulate Prof. Yurovskaya on her birthday and wish her health, happiness, and success in her research and teaching work.