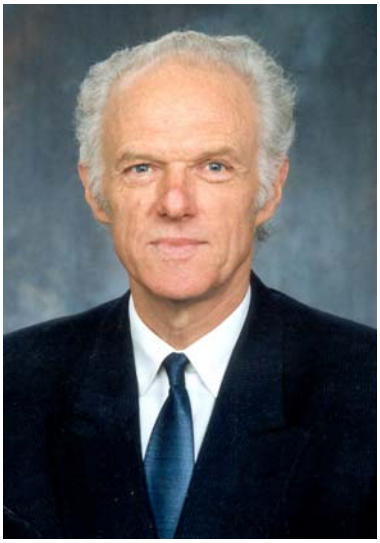
Chemistry of Heterocyclic Compounds, Vol. 42, No. 12, 2006

ANNIVERSARIES AND DATES



EDMUNDS LUKEVICS

Biographical Information

Born

December 14, 1936 in Liepaja, Latvia

Education

1942-1944 1st National School of Liepaja
1945-1949 5th Junior Secondary School of Liepaja
1949-1953 1st Secondary School of Liepaja
1953-1958 Faculty of Chemistry, Latvian State University.

Academic Degrees and Titles

1966 Candidate of Chemical Sciences, thesis "Organosilicon Derivatives of Furan" (Latvian Academy of Sciences, Riga)
1973 Doctor of Chemical Sciences, thesis "Investigations in the Field of Biologically Active Nitrogen-containing Organosilicon Compounds" (Latvian Academy of Sciences, Riga)

Translated from Khimiya Geterotsiklicheskikh Soedinenii, No. 12, pp. 1763-1776, December, 2006.

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1979 Professor of Organic Chemistry
1982 Corresponding Member of the Latvian Academy of Sciences
1987 Full Member of the Latvian Academy of Sciences
1991 Habilitated Doctor of Chemistry (Dr. habil.chem.) of the Republic of Latvia

Place of Employment

Latvian Institute of Organic Synthesis

1958-1967 Junior researcher
1968-1970 Senior researcher
From 1970 Head of the Laboratory of Organometallic Chemistry
1980-1982 Vice-Director for Scientific Work
1982-2003 Director

Awards, Honorary Titles, Prizes

Awards of the Presidium of the Latvian Academy of Sciences, 1971, 1973, 1977, 1981, 1982, 1985, 1987, 1989, 1992.
State Prizes of the Latvian SSR, 1974, 1989.
Gustavs Vanags Prize on Chemistry, the Latvian Academy of Sciences, 1986.
Prize and Annual Science Prize (the Latvian Academy of Sciences, the "Grindex" Company), 1999.
Prize of the Cabinet of Ministers of the Republic of Latvia, 2004.
S. Hiller Medal (the Latvian Institute of Organic Synthesis), 1990.
Gustavs Vanags Medal (the Riga Technical University), 1991.
D. H. Grindel Medal ("Grindex" Company), 1995.
L. Liepina Medal (the Institute of Inorganic Chemistry), 1996.
The Silver Medal of Milan University, 1996.
The Grand Medal of the Latvian Academy of Sciences, 1996.
Honorary Badge of the First Order of Three Stars, 1997.
O. Schmiedebergs Medal (the Latvian Pharmaceutical Society), 1998.
Paul Walden's Medal (the Riga Technical University), 2000.
The Gold Badge of Honor of the "Grindex" Company, 2001.
Diploma in Memory of Prof. A. N. Kost (International "Scientific Partnership" Foundation, M. V. Lomonosov Moscow State University, D. I. Mendeleev Russian Chemical Society), 2006.
American Medal of Honor (American Biographical Institute), 2006.
Gold Medal for the Development of Chemical Sciences in Latvia (American Biographical Institute), 2006.
Platon Medal (Cambridge International Biographical Centre, Great Britain), 2006.
International Man of the Year (Cambridge International Biographical Centre, Great Britain), 1992-1993, 1994-1995).
Man of the Year (American Biographical Institute), 1994, 2005.
The Plato Award (IBC), 2006

Managerial Activity

In Latvia

President of the Council of the Presentation of Doctoral Theses at the Institute of Organic Synthesis, 1982-1991.
Member of the Presidium and Senate of the Latvian Academy of Sciences, 19870-1991.
Member of the Board of the Division of Chemical and Biological Sciences at the Latvian Academy of Sciences, 1987-1999.
Chairman of the Council for Habilitation and Promotion in the Field of Chemistry and Pharmacy at the Latvian Institute of Organic Synthesis, 1994-1999.
Member (Chairman 1991-1993, 1997-2002) of the Expert Commission on Chemistry at the Latvian Science Council, 1991-2006.
Member of the Council on Promotion in the Field of Chemistry at the University of Latvia, from 1998.
Member of the Commission on Terminology of the Latvian Academy of Sciences, 1987-1999.
Vice-President of the Taiho Foundation of Latvia, 1993-2003.
Member of the Latvian Chemical Society, from 1995.
Member of the Pharmacological Society of Latvia, from 1998.

In the USSR

Chairman of the Scientific Council of the USSR State Committee on Science and Technology (GKNT) "Chemistry and Technology of Organic Compounds of Sulfur," 1982-1987.
Chairman of the Commission of the Academy of Sciences of the USSR on "The Application of Organometallic Compounds in the National Economy," 1984-1991.
Member of the Coordination Council "To Seek New Drugs, Develop the Technology, and Assimilate the Industrial Production of New Products and Their Medicinal Forms," 1983-1989.
Member of the United Information–Library Council of the Academy of Sciences of the USSR, 1985-1990.
Member of the Science Council of the Academy of Sciences of the USSR on Physiologically Active Compounds, 1986-1991.
Member of the Scientific-Technical Council of the Ministry of Medical and Microbiological Industry of the USSR, 1987-1990.
Member of the Interdepartmental Scientific-Technical Complex Biogen, 1987-1991.
Member of the Committee on Biotechnology at the Commission of the USSR on UNESCO Affairs, 1987-1991.
Member of the Soviet National Committee on the Collection and Evaluation of Data in the Field of Science and Technology CODATA, 1987-1990.
Member of the Council for Coordination of Scientific Activity of the Department of Biochemistry, Biophysics, and Chemistry of Biologically Active Compounds of the Academy of Sciences of the USSR, 1988-1991.
Member of the Scientific Council of the USSR State Committee for Science and Technology (GKNT) in the "Fight against the Most Important Diseases," 1988-1991.

International Organizations

Member of the Department of Organometallic Chemistry of the Federation of European Chemical Societies, 1995-2005.
Member of the Department of Organometallic Chemistry of the European Association of Chemical and Molecular Sciences (EuCheMS), from 2006.
Member of the American Chemical Society, from 1996.

Member of the National Geographical Society, from 1997.
Member of the Management Committee of the International Conference "Organometallic Chemistry of Germanium, Tin, and Lead," 1992, 1995, 1998, 2001.
Member of the Management Committee of the International Symposium on Organosilicon Chemistry, 1993, 1996, 1999, 2002, 2005.

Work at the Editorial Boards of Journals and Other Periodical Publications

Chemistry of Heterocyclic Compounds (Springer), 1980-1985; Editor-in-Chief, from 1985.
Proceedings of the Academy of Sciences of the Latvian SSR, *Chemical Series*, 1982-1990.
Bioorganic Chemistry, 1989-1993.
Applied Organometallic Chemistry, from 1990.
Latvian Journal of Chemistry, from 1991.
Main Group Metal Chemistry, from 1992.
Metal-Based Drugs, 1993-2003.
Mendeleev Communications, from 1994.
Advances in Heterocyclic Chemistry, from 1994.
Silicon Chemistry, from 2001.
ARKIVOC, from 2001.
Bioinorganic Chemistry and Applications, from 2003.
Heterocyclic Communications, from 2005.

Invited Lecturer at Universities

Indian Institute of Science, Bangalore (India), 1989.
Indian Institute of Technology, Bombay (India), 1989.
University of Dresden (Germany), 1989.
Universities of Bordeaux, Toulouse, Montpelier, and Marseilles (France), 1990, 1994.
Tohoku University, Sendai (Japan), 1991, 1992.
University of Lund (Sweden), 1992.
University of Alcalá de Henares (Spain), 1993.
Tokyo University of Science (Japan), 1997.
University of Kyoto (Japan), 1997, 2002.
University of Kanagawa (Japan), 2002.

Plenary and Invited Lectures at Symposia

The Fourth International Symposium on Organosilicon Chemistry (Moscow, USSR), 1975.
All-Union Symposium "Biologically Active Compounds of Elements of Group IVB" (Irkutsk, USSR), 1975.
40th Nobel Symposium "Biochemistry of Silicon and Related Problems" (Lidingö, Sweden), 1977.
VI Symposium on Chemistry of Heterocyclic Compounds (Brno, Czechoslovakia), 1978.
III All-Union Scientific Conference on the Chemistry and Technology of Furan Compounds (Krasnodar, USSR), 1978.

II All-Union Conference on the Chemistry of Heterocyclic Compounds (Riga, Latvian SSR), 1979.
Third All-Union Conference on "Biologically Active compounds of Silicon, Germanium, Tin, and Lead" (Irkutsk, USSR), 1980.
V All-Union Conference on the Chemistry and Application of Organosilicon Compounds (Tbilisi, Georgian SSR), 1980.
II All-Union Conference on Organometallic Chemistry (Gorky, USSR), 1984.
7th International Symposium on Organosilicon Chemistry (Kyoto, Japan), 1984.
VI FECHEM Conference on Organometallic Chemistry (Riga, Latvian SSR), 1985.
Germanium Day, Riga, Latvian SSR, 1986.
VI All-Union Conference on the Chemistry and Application of Organosilicon Compounds (Riga, Latvian SSR), 1986.
IV All-Union Conference on the Chemistry of Nitrogen-Containing Compounds (Novosibirsk, USSR), 1987.
II Soviet-Indian Symposium on Organometallic Chemistry (Irkutsk, USSR), 1989.
17th DDR-Poland Colloquium on Organometallic Chemistry (Holzhau, DDR), 1989.
6th International Conference on Organometallic and Coordination Chemistry of Germanium, Tin, and Lead (Brussels, Belgium), 1989.
Huang Minlon Symposium on Organic Chemistry (Shanghai, P. R. China), 1989.
International Chemical Conference on Silicon and Tin (Kuala Lumpur, Malaysia), 1989.
XIV Mendeleev Conference on General and Applied Chemistry (Tashkent, Uzbek SSR), 1989.
XVII All-Union Conference "Synthesis and Reactivity of Organic Compounds of Sulfur" (Tbilisi, Georgian SSR), 1989.
9th International Symposium on Organosilicon Chemistry (Edinburgh, UK), 1990.
1st Meeting of the European Society of Sonochemistry (Autrans, France), 1990.
11th International Symposium on Medicinal Chemistry (Jerusalem, Israel), 1990.
S. Hiller Memorial Lectures (Riga, Latvia), 1990.
1st Meeting of Japanese Germanium Discussion Group (Tokyo, Japan), 1991.
International Conference on Environmental and Biological Aspects of Main Group Organometals (Padua, Italy), 1991.
3rd Swedish-German Workshop: Nucleic Acid Synthesis, Structure and Function (Uppsala, Sweden), 1992.
2nd ANAIC International Conference on Materials Science and Environmental Chemistry of Main Group Elements (Kuala Lumpur, Malaysia), 1993.
Todai Symposium "Ge-Sn-Pb Tokyo 93": International Symposium on Organic, Bioorganic, and Bioinorganic Chemistry of Compounds of Higher Row Group 14-Elements (Tokyo, Japan), 1993.
10th International Symposium on Organosilicon Chemistry (Poznan, Poland), 1993.
3rd Meeting of the European Society of Sonochemistry (Figueira de Foz, Portugal), 1993.
14th Nordic Meeting of Structural Chemists (Helsinki, Finland), 1993.
8th International Conference on Organometallic Chemistry of Germanium, Tin, and Lead (Sendai, Japan), 1995.
8th IUPAC Symposium on Organometallic Chemistry Directed Towards Organic Synthesis (Santa Barbara, USA), 1995.
8th Symposium: Heterocycles in Bioorganic Chemistry (Como, Italy), 1996.
9th International Conference on the Coordination and Organometallic Chemistry of Germanium, Tin, and Lead (Melbourne, Australia), 1998.
9th International Conference on Organosilicon Chemistry (Sendai, Japan), 1999.
International Conference on Organic Synthesis "Balticum Organicum Sinteticum - 2000" (Vilnius, Lithuania), 2000.
X International Symposium "Jubilee Krka Prizes" (Novo Mesto, Slovenia), 2000.

*The papers dedicated to the birthday of Prof. E. Lukevics published in this issue relate to the field of the organometallic chemistry of heterocycles; papers on heterocyclic chemistry will be published in subsequent issues.**

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* A special issue of the electronic journal *ARKIVOC*, issue V, 2006, dedicated to the birthday of Prof. E. Lukevics, see:
http://www.arkat-usa.org.

THE MAIN PUBLICATIONS BY E. LUKEVICS FOR THE LAST 5 YEARS*

Reviews and Chapters in Books

E. Lukevics and L. Ignatovich, Biological activity of organogermanium compounds, in: Z. Rappoport (editor), *The Chemistry of Organic Germanium, Tin and Lead Compounds*, Vol. 2, Pt. 2, Chap. 23, Wiley, Chichester (2002), pp.1653-1683.

E. Lukevics and O. Pudova, Biological activity of organotin and organolead compounds, in: Z. Rappoport (editor), *The Chemistry of Organic Germanium*, *Tin and Lead Compounds*, Vol. 2, Pt. 2, Chap. 24, Wiley, Chichester (2002), pp.1685–1714.

E. Lukevics and O. Pudova, Silyl imidic esters, in: *Science of Synthesis*. Houben-Weyl *Methods of Molecular Transformations. Organometallics*, Vol. 4: *Compounds of group 15 (As, Sb, Bi) and silicon compounds*, G. Thieme, Stuttgart (2002), pp. 305-315.

E. Lukevics, P. Arsenyan, and O. Pudova, Silicon-based dendrimers, *Main Group Met. Chem*., **25**, 135–154 (2002).

E. Lukevics, P. Arsenyan, and O. Pudova, Molecular structure of organosilicon compounds with Si–Ru, Si–Rh and Si–Pd bonds, *Main Group Met. Chem*., **25**, 415-436 (2002).

E. Lukevics, P. Arsenyan, and O. Pudova, Molecular structure of organosilicon compounds with Si–Os, Si–Ir, Si–Pt bonds, *Main Group Met. Chem*., **25**, 541-560 (2002).

E. Abele and E. Lukevics, Recent advances in the synthesis and transformations of heterocycles mediated by fluoride ion activated organosilicon compounds, *Heterocycles*, **57**, 361-404 (2002).

E. Lukevics, P. Arsenyan, S. Belyakov, and O. Pudova, Molecular structure of thiophene 1,1-dioxides, thiophene S-oxides, and their derivatives, *Chem. Heterocycl. Comp*., **38**, 632-645 (2002). [*Khim. Geterotsikl. Soedin*., 725-739 (2002)].

E. Lukevics, P. Arsenyan, S. Belyakov, and O. Pudova, Molecular structure of selenophenes and tellurophenes, *Chem. Heterocycl. Comp*., **38**, 763-777 (2002). [*Khim. Geterotsikl. Soedin*., 867-883 (2002)].

P. Arsenyan, K. Oberte, O. Pudova, and E. Lukevics, Transformations of 1,2,3-selenadiazoles, *Chem. Heterocycl. Comp*., **38** 1437-1447 (2002). [*Khim. Geterotsikl. Soedin*., 1627–1639 (2002)].

E. Lukevics, P. Arsenyan, and O. Pudova. Methods for the synthesis of oligothiophenes, *Heterocycles*, **60**, 663-687 (2003).

G. Veinberg, M. Vorona, I. Shestakova, I. Kanepe, and E. Lukevics, Design of β-lactams with mechanism based nonantibacterial activities, *Curr. Med. Chem.,* **10**, 1741-1757 (2003).

E. Abele, R. Abele, O. Dzenitis, and E. Lukevics, Indole and isatin oximes: Synthesis, reactions, and biological activity, *Chem. Heterocycl. Comp*., **39**, 3-35 (2003). [*Khim. Geterotsikl. Soedin*., 5-37 (2003)]

E. Abele, R. Abele, and E. Lukevics, Pyridine oximes: Synthesis, reactions, and biological activity., *Chem. Heterocycl. Comp*., **39,** 825(865 (2003). [*Khim. Geterotsikl. Soedin.*, 963-1005 (2003)].

E. Abele, R. Abele, and E. Lukevics, Pyrrole oximes: Synthesis, reactions, and biological activity, *Chem. Heterocycl. Comp*., **40**, 1-15 (2004). [*Khim. Geterotsikl. Soedin*., 3-19 (2004)].

E. Abele, R. Abele, K. Rubina, and E. Lukevics, Quinoline oximes: Synthesis, reactions, and biological activity, *Chem. Heterocycl. Comp*., **41**, 137-162 (2005). [*Khim. Geterotsikl. Soedin*., 163-190 (2005)]

E. Lukevics. Sila heterocycles in 2005, *Chem. Heterocycl. Comp*., **41**, 1439-1443 (2005). [*Khim. Geterotsikl. Soedin*., 1744-1748 (2005)]

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* See the complete bibliography by E. Lukevics for 1956-2001 (1940 publications) in "Latvian researchers. Edmunds Lukevics, Academician of the Latvian Academy of Sciences. Biobibliography, Latvian Institute of Organic Synthesis, Library of the Latvian Academy, Riga, 2001" [in English and Latvian]

E. Lukevics and L. Ignatovich. Biological activity of organosilicon compounds, in: M. Gielen, E.R.T. Tieking (editors), *Metallotherapeutic Drugs & Metal-Based Diagnostic Agents*, Wiley, Chichester (2005), pp. 83-107.

E. Lukevics and L. Ignatovich. Biological activity of organogermanium compounds, in: M. Gielen, E.R.T. Tieking (editors), *Metalloterapeutic Drugs & Metal-Based Diagnostic Agents*, Wiley, Chichester (2005), pp. 279-295.

Original Articles
2002

E. Lukevics, E. Abele, P. Arsenyan, R. Abele, K. Rubina, I. Shestakova, I. Domracheva, and V. Vologdina, Synthesis and cytotoxicity of silicon containing pyridine and quinoline sulfides, *Metal-Based Drugs*, **9**, 45-51 (2002).

E. Lukevics, P. Arsenyan, K. Rubina, I. Shestakova, I. Domracheva, A. Nesterova, J. Popelis, and O Pudova,. Aminoacid hydroselenites: synthesis and cytotoxicity, *Appl. Organomet. Chem.,* **16**, No. 4: Spec. iss.: *5th Intern. Conf. on Environmental and Biological Aspects of Main-group Organometals, 2001, Graz, Austria,* pp. 235-238 (2002).

E. Lukevics, P. Arsenyan, I. Shestakova, I. Kanepe, S. Belyakov, J. Popelis, and O. Pudova, Synthesis, structure and cytotoxicity of organoammonium selenites, *Appl. Organomet. Chem.,* **16**, No. 4, Spec. iss.: 5th *Intern. Conf. on Environmental and Biological Aspects of Main-group Organometals, 2001, Graz, Austria*, pp.228-234 (2002).

E. Lukevics, L. Ignatovich, and S. Belyakov, The crystal structure of 2-furylgermatrane, *Main Group Met. Chem*., **25**, 183-184 (2002).

E. Lukevics, L. Ignatovich, and A. Kemme, The crystal structure of *p*-bromophenylgermatrane, *Main Group Met. Chem.,* **25**, 313-314 (2002).

E. Lukevics, L. Ignatovich, T. Shul'ga, and S. Belyakov, The crystal structure of *m*-bromobenzylgermatrane, *Main Group Met. Chem.*, **25**, 325-326 (2002).

E. Lukevics, L. Ignatovich, T. Shul'ga, and S. Belyakov, The crystal structure of 4-fluoro-1-phenylethynylgermatrane, *Main Group Met. Chem*., **25**, 463-464 (2002).

E. Lukevics, L. Ignatovich, T. Shul'ga, O. Mitchenko, and S. Belyakov, Synthesis, molecular structure and biological activity of bromobenzylgermatranes, *J. Organomet. Chem*., **659**, 165-171 (2002).

E. Abele, O. Dzenitis, J. Popelis, and E. Lukevics, Novel fluoride ion mediated method for rapid silylation of carboxylic acids with azidotrimethylsilane under phase-transfer catalysis conditions, *Main Group Met. Chem*., **25**, 585-587 (2002).

E. Abele, K. Rubina, R. Abele, O. Dzenitis, P. Arsenyan, Yu. Popelis, M. Veveris, D. Meirena, and E. Lukevics, Silacyclic derivatives of heteroaromatic sulfides as selective cholesterol level lowering and vasodilating agents, *Metal-Based Drugs*, **9**, 307-313 (2002).

E. Abele, K. Rubina, M. Fleisher, Yu. Popelis, P. Arsenyan, and E. Lukevics, Synthesis of unsymmetric diynes by palladium and cesium fluoride catalyzed coupling of terminal bromoalkynes with alkynylstannane, *Appl Organomet. Chem*., **16**, 141-147 (2002).

P. Arsenyan, O. Pudova, and E. Lukevics, A novel method for the synthesis of 2,5-diarylselenophenes, *Tetrahedron Lett*., **43**, 4817-4819 (2002).

M. Fleisher, V. Stonkus, L. Leite, and E. Lukevics, Theoretical investigations of 1,4-butanediol and 2-butene-1,4-diol cyclodehydration using postprocessing visualization of quantum-chemical calculation data, *Intern. J. Quantum Chem*., **88**, 670-675 (2002).

I. Iovel, L. Golomba, Yu. Popelis, and E. Lukevics, Diastereoselective addition of trimethylsilyl cyanide to chiral O- , S- and N-heterocyclic aldimines, *Appl. Organomet. Chem.*, **16**, 133-140 (2002).

L. Leite, V. Stonkus, L. Ilieva, L. Plyasova, T. Tabakova, D. Andreeva, and E. Lukevics, Promoting effect of gold on the structure and activity of Co/kaolin catalyst for the 2,3-dihydrofuran synthesis, *Catal. Commun*., **3**, 341-347 (2002).

A. Zablotskaya, I. Segal, S. Germane, I. Shestakova, E. Lukevics, T. Kniess, and H. Spies, Synthesis and biological activity of '3+1' mixed ligand (3-thiapentane-1,5-dithiolato)oxorhenium(V) complexes bearing 1,2,3,4-tetrahydro(iso)quinoline and quinoline, *Appl. Organomet. Chem*., No. 9, Spec. iss.: *XIV FECHEM Conf. on Organometallic Chemistry, 2001, Gdansk, Poland*, **16**, 550-555 (2002).

R. Abele, E. Abele, K. Rubina, O. Dzenitis, P. Arsenyan, I. Shestakova, A. Nesterova, I. Domracheva, J. Popelis, S. Grinberga, and E. Lukevics, Synthesis and cytotoxicity of 3-(hetarylthio)-1-propynyl(trimethyl)silanes, *Chem. Heterocycl. Comp*., **38**, 867-872 (2002). [*Khim*. *Geterotsikl. Soedin*., 977-982 (2002)].

E. Abele, O. Dzenitis, K. Rubina, and E. Lukevics, Synthesis of N- and S-vinyl derivatives of heteroaromatic compounds using phase-transfer catalysis, *Chem. Heterocycl. Comp.*, **38**, 682-685 (2002). [*Khim*. *Geterotsikl. Soedin*., 776-779 (2002)].

V. Dirnens, O. Slyadevskaya, and E. Lukevics, Addition of nitrile oxides to allyl esters of aryl(hetaryl)carboxylic acids, *Chem. Heterocycl. Comp.,* **38**, 434–437 (2002). [*Khim*. *Geterotsikl. Soedin*., 499-502 (2002)].

A. Zablotskaya, I. Segal, A. Kemme, S. Germane, J. Popelis, E. Lukevics, R. Berger, and H. Spies, Silyl modification of biologically active compounds. 7. Synthesis, structure, physicochemical and biological properties of some silicon-containing "3+1" oxorhenium(V) complexes, *Chem. Heterocycl. Comp*., **38**, 477**-**489 (2002). [*Khim*. *Geterotsikl. Soedin*., 543-555 (2002)].

A. Zablotskaya, I. Segal, S. Germane, I. Shestakova, I. Domracheva, A. Nesterova, A. Geronikaki, and E. Lukevics, . Silyl modification of biologically active compounds. 8. Trimethylsilyl ethers of hydroxyl-containing thiazole derivatives, *Chem. Heterocycl. Comp*., **38**, 859-866 (2002). [*Khim*. *Geterotsikl. Soedin*., 968-976 (2002)].

I. Iovel, L. Golomba, J. Popelis, S. Grinberga, S. Belyakov, and E. Lukevics, Synthesis of N-pyridylmethylidene-2-aminopyridines and their methyl-substituted derivatives in the presence of molecular sieves, *Chem. Heterocycl. Comp*., **38**, 1210-1229 (2002). [*Khim. Geterotsikl. Soedin*., 1375-1395 (2002)].

I. Iovel, L. Golomba, J. Popelis, and E. Lukevics, Hydrosilylation of heterocyclic aldimines catalyzed by transition metal complexes, *Chem. Heterocycl. Comp*., **38**, 46-53 (2002). [*Khim. Geterotsikl. Soedin*., 51-59 (2002)].

2003

E. Lukevics, R. Abele, M. Fleisher, J. Popelis, and E. Abele, Fluoride ion catalyzed silylation of ketoximes by hydrosilanes, *J. Mol. Catal*. *A: Chemic*., **198**, 89-98 (2003).

E. Lukevics, P. Arsenyan, S. Belyakov, and O. Pudova. Synthesis, structure and chemical transformations of ethynylgermatranes, *Eur. J. Inorg. Chem*., **17**, 3139-3143 (2003).

E. Lukevics, P. Arsenyan, J. Popelis, and O. Pudova, Nucleophilic addition of secondary amines to bis[2-(5-trimethylsilyl(germyl))thienyl]dimethylsilane(germane)-1,1,1',1'-tetroxides, *Phosphorus*, *Sulfur, and Silicon*, **178**, 639-647 (2003).

E. Lukevics, L. Ignatovich, and I. Shestakova, Synthesis, psychotropic and anticancer activity of 2,2-dimethyl-5-[5'-trialkylgermyl(silyl)-2'-hetarylidene]-1,3-dioxane-4,6-diones and their analogues, *Appl. Organometal. Chem*., **17**, 898-905 (2003).

E. Lukevics, L. Ignatovich, T. Shul'ga, and S. Belyakov, The crystal structure of 1-(4-ethoxy-carbonylphenyl)germatrane, *Main Group Met. Chem*., **26**, 67-70 (2003).

E. Lukevics, L. Ignatovich, T. Shul'ga, and S. Belyakov, The crystal structure of 2-benzo[*b*]thienylgermatrane, *Appl. Organomet. Chem*., **17**, 745-746 (2003).

E. Abele, R. Abele, P. Arsenyan, and E. Lukevics, A new pathway for the preparation of diaryl acetylenes, *Tetrahedron Lett*., **44**, 3911-3913 (2003).

R. Abele, E. Abele, M. Fleisher, S. Grinberga, and E. Lukevics, Novel fluoride ion mediated synthesis of unsymmetrical siloxanes under phase transfer catalysis conditions, *J. Organomet. Chem*., 686, 52-57 (2003).

A. Andersons, S. Simonyan, and E. Lukevics, Catalytic transformations of unsubstituted five-membered sulfur-containing heterocycles on the tungsten catalyst, *Latv. J. Chem.*, 369-374 (2003).

P. Arsenyan, K. Rubina, I. Shestakova, E. Abele, R. Abele, I. Domracheva, A. Nesterova, Yu. Popelis, and E. Lukevics, Synthesis and cytotoxicity of silylalkylthio-substituted N-heterocycles and their hydroselenites, *Appl. Organomet. Chem*., **17**, 825-830 (2003).

P. Arsenyan, I. Shestakova, K. Rubina, I. Domracheva, A. Nesterova, K. Vosele, O. Pudova, and E Lukevics, Organoammonium hydroselenites: antitumor action through radical balance regulation, *Eur. J Pharmacol*., **465**, 229-235 (2003).

K. Rubina, E. Abele, P. Arsenyan, M. Fleisher, J. Popelis, A. Gaukhman, and E. Lukevics, The role of palladium catalyst and base in stereoselective transformations of (*E*)-2-chlorovinylsulfides, *Tetrahedron*, **59**, 7603-7607 (2003).

K. Rubina, E. Abele, J. Popelis, S. Grinberga, P. Arsenyan, and E. Lukevics, Novel stereoselective phase-transfer catalytic synthesis and some applications of (*E*)-2-chlorovinylthioarenes and hetarenes, *Phosphorus*, *Sulfur*, *and Silicon*, **178**, 521-529 (2003).

E. Lukevics, A. Zablotskaya, I. Segal, S. Germane, and J. Popelis, Silyl modification of biologically active compounds. 9. Synthesis and biological activity of novel 1,3-disilabenzo[5,6]cyclohexene derivatives, *Chem. Heterocycl. Comp*., **39**, 813-818 (2003). [*Khim*. *Geterotsikl. Soedin*., 941-947 (2003)].

G. Veinberg, R. Bokaldere, K. Dikovskaya, M. Vorona, I. Kanepe, I. Shestakova, E. Yashchenko, and E. Lukevics, Synthesis of cytotoxic 1,3,4-trisubstituted 2-azetidinones, *Chem. Heterocycl. Comp*., **39**, 587-593 (2003). [*Khim*. *Geterotsikl. Soedin*., 680-687 (2003)].

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