"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.

Electronic representations in organic chemistry. Khim. v shkole 15 no.4:3-16 Jl-Ag '60. (MIRA 13:9)

1. Chlen-korr. AN SSSR.
(Chemical bonds) (Chemistry, Organic)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

5.3700

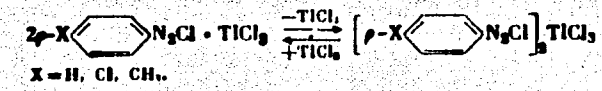
78300
SOV/79-30-3-54/69

AUTHORS: Kazitsyna, L. A., Reutov, O. A., Buchkovskiy, Z. F.

TITLE: Double Diazonium Salts of Thallium

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 1008-1012 (USSR)

ABSTRACT: A series of double salts of diazonium thallium chlorides, $(ArN_2Cl)_2TlCl_3$, were prepared and their absorption spectra taken. It was found that under certain conditions interconversion of 1:1 and 2:1 double salts takes place:



$(p\text{-}BrC_6H_4N_2Cl)_2TlCl_3$, colorless crystals, mp 86° and $(p\text{-}NO_2C_6H_4N_2Cl)_2TlCl_3$, yellow crystals, mp 58° were obtained by addition of an alcoholic solution of the

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Double Diazonium Salts of Thallium

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SOV/79-30-3-54/69

corresponding double salts to cold absolute ether. $(C_6H_5N_2Cl)_2TlCl_3$, colorless fine crystals, mp 86°, $(p\text{-}CH_3C_6H_5N_2Cl)_2TlCl_3$, colorless crystals, mp 103° and $(p\text{-}ClC_6H_5N_2Cl)_2TlCl_3$, colorless crystals, mp 117° were obtained by adding solutions of the corresponding 1:1 diazonium salts in absolute alcohol to cold ether. Absorption spectra of the compounds prepared are given in Table 1. There are 1 Table; and 4 references, 2 German, and 2 Soviet.

ASSOCIATION: Moscow State University (Moskovskiy gosudarstvennyy universitet)

SUBMITTED: April 29, 1959

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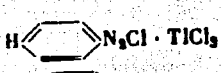
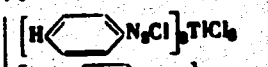
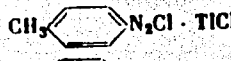
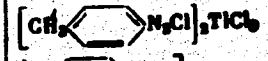
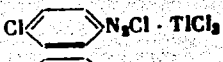
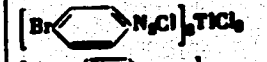
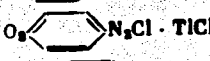
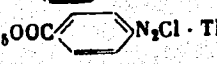
APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

Double Diazonium Salts of Thallium

78300
SOV/79-30-3-54/69

Table 1. Frequency Maxima of N=N Bond (in cm^{-1}) for Solid Samples.

(a)	(b)	(c)	(d)	(e)
	1:1		2:1	
	2246 (2257)	2294	2261	
	2233 (2247)	2281	2253	
	2253	2277	2267	
	2230 (2260)	2267	2246	
	2273 (2260)	2303	2292	
	2268	2295	—	—

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Key for Table 1: (a) Compounds, (b) maxima, (c) diazonium chloride.

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5-3610
5.4130

80228
S/076/60/034/04/25/042
B010/B009

AUTHORS: Kazitsyna, L. A., Reutov, O. A., Buchkovskiy, Z. F. (Moscow)

TITLE: Infrared Absorption Spectra of Double Diazonium Salts

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 4, pp. 850 - 855

TEXT: In continuation of an earlier paper (Ref. 1) the infrared absorption spectra over the range 2100-2350 cm^{-1} (range of valency oscillations of the $N \equiv N$ bond) of thirty double diazonium salts of the composition $p\text{-}XC_6H_4N_2Cl \cdot MeCl_n$ ($X = H, CH_3, Cl, CH_3O, NO_2, C_2H_5OOC$ and $Me = Fe^{3+}, Cd^{2+}, Hg^{2+}, Sb^{3+}, Zn^{2+}$) as well as of the corresponding aryldiazonium chlorides and aryldiazoniumborofluorides were recorded. The data obtained (Table 1) show that the location of the absorption bands of the $N \equiv N$ bond, practically speaking, depends as much on the substituent in the aromatic ring as on the inorganic part of the molecules. A direct connection between the shift of the absorption bands and the structure of the bond has not been established. Several double diazonium salts with metal chlorides show two distinct bands, others show more or less clearly discernible

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80228

Infrared Absorption Spectra of Double Diazonium Salts S/076/60/034/04/25/042
B010/B009

asymmetrical absorption bands, and only a few of them show a symmetric peak (characteristic of the N≡N bond). All borofluorides of the aryldiazonium salts under investigation show, on the other hand, only one symmetrical absorption peak (in the range 2300-2284 cm^{-1}, with the only exception of p-methoxyphenyldiazonium-borofluoride, where the peak is at 2246 cm^{-1}). The results concerning the absorption of solutions (Table 2) of fifteen of the compounds under investigation show that there is only one intensive symmetric band to be observed. The absorption maximum is in the vicinity of the absorption maximum of the N≡N bond of aryldiazonium chlorides and borofluorides. The spectra were recorded with an IKS-11 spectrophotometer. K. A. Kocheshkov and A. N. Nesmeyanov are mentioned in the paper. There are 2 figures, 2 tables, and 10 references, 4 of which are Soviet.

SUBMITTED: July 8, 1958

Card 2/2

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

Reutov, O. A.

81863

S/020/60/133/02/36/068
B016/B060

5.3100

AUTHORS: Reutov, O. A., Corresponding Member of the AS USSR, Shatkina, T. N.

TITLE: Isomerization of the Free n-Propyl Radical in Solution

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 2, pp. 381-382

TEXT: By using C^{14} the authors established that the radical resulting in the thermal decomposition of n-butyryl peroxide in solutions is isomerized on the strength of the reaction $(CH_3CH_2CH_2COO)_2 \rightarrow$ $\rightarrow 2CH_3-CH_2-CH_2\cdot + 2CO_2$ as follows: $CH_3-CH_2-C^{14}H_2\cdot \rightleftharpoons \cdot CH_2-CH_2-C^{14}H_3\cdot$ The n-butyryl peroxide marked in the α-position was decomposed in boiling CCl_4. For the purpose of determining the position of the C^{14} atom in the molecule of propyl chloride, this was hydrolyzed down to n-propyl alcohol, the alcohol was then oxidized to propionic acid and acetic acid. Acetic acid proved to be active (about 4% of the initial

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81863

Isomerization of the Free n-Propyl Radical in Solution

S/020/60/133/02/36/068
B016/B060

activity of peroxide). From this it follows that part of the n-propyl radicals underwent regrouping. In order to determine the position of C^{14} in the molecule of acetic acid, its sodium salt was, on the one hand, melted together with alkali and, on the other hand, cleavage was carried out by Schmidt's method. In the former case the authors proved the inactivity of the resulting soda, whereas in the latter the entire activity of acetic acid passed over to methyl amine. From the activity values of acetic acid and methyl amine determined in three parallel experiments it results that n-propyl radical is isomerized to $4.0 \pm 0.5\%$ under the experimental conditions. Thus, the n-propyl radical is isomerized in solution by the migration of the H-atom from the β-position and not by the migration of the methyl group, as the authors had earlier assumed (Ref. 3). Papers by V. V. Voyevodskiy and R. Ye. Mardaleyshvili are mentioned (Ref. 2). There are 4 references: 2 Soviet and 2 American.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov). Akademiya Meditsinskikh nauk SSSR (Academy of Medical Sciences USSR)

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APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SHATKINA, T.N.

Isomerization of the propyl cation. Dokl.AN SSSR 133 no.3: 606-608 Jl '60. (MIRA 13:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova; Akademiya meditsinskikh nauk SSSR. 2. Chlen-korrespondent AN SSSR (for Reutov).
(Radicals(Chemistry))

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

83137

S/020/60/133/005/015/019
B016/B060

5.3200

AUTHORS: Reutov, O. A., Corresponding Member AS USSR, Ertel', G. A., Ptitsina, O. A.

TITLE: Reaction of Isotopic Exchange Between the Boron Fluorides of Diaryl Iodonium and the Aryl Iodides Marked With I^{131}

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 5, pp. 1108-1110

TEXT: Basing on results obtained by A. N. Nesmeyanov (Refs. 1-5), L. G. Makarova and A. N. Nesmeyanov (Ref. 4), the authors arrived at the conclusion that the reaction mentioned in the title is possible; it was studied by them and can be represented as follows:

$Ar_2I^+BF_4^- + Ar\overset{*}{I} \rightleftharpoons Ar_2\overset{*}{I}^+BF_4^- + ArI$ ($\overset{*}{I} = I^{131}$). The methods of producing the reagents required and of determining the activity are described. Table 1 gives the Ar_2IBF_4 synthesized by the authors for the first time, along with melting temperatures, analyses, and yields. The reaction of

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83137

Reaction of Isotopic Exchange Between the Boron Fluorides of Diaryl Iodonium and the Aryl Iodides Marked With I^{131}

S/020/60/133/005/015/019
B016/B060

isotopic exchange discussed here was found to take place only near the temperature at which diaryl iodonium boron fluoride decomposes. The authors studied the reactions of diphenyl iodonium boron fluoride with iodo benzene, and of di-(p-chlorophenyl)-iodonium boron fluoride with p-chloro-iodo benzene, of di-(p-bromophenyl)-iodonium boron fluoride with p-bromo-iodo benzene, of di-(p-tolyl)-iodonium boron fluoride with p-iodo toluene, of di-(p-anisyl)-iodonium boron fluoride with p-iodo anisole, of di-(m-carbethoxy-phenyl)-iodonium boron fluoride with m-iodo-benzoic acid ethyl ester, as well as of di-(m-nitro-phenyl)-iodonium boron fluoride with m-iodo-nitro benzene. Table 2 gives the experimental conditions (temperature and period of reaction), moreover the degree of exchange and the diaryl iodonium boron fluoride yield. Because of varying thermal stability of the compounds, the experiments could not be carried out at the same temperature. Concerning the influence of the nature of the substituent in para- or meta-position of the benzene ring on the reaction rate of isotopic exchange it can therefore be only said that electronegative substituents delay the

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

83137

Reaction of Isotopic Exchange Between the Boron Fluorides of Diaryl Iodonium and the Aryl Iodides Marked With I^{131}

S/020/60/133/005/015/019
B016/B060

reaction. This circumstance is apparently caused by the decrease of electron density on the iodine atom in the XC_6H_4I, with X being an electronegative substituent. In the case of non-substituted phenyl and in the monosubstituted benzene ring, diaryl iodonium boron fluorides form with a sufficiently high activity. The reaction of isotopic exchange can be recommended as a convenient method of producing I^{131}-marked diaryl iodonium salts. There are 2 tables and 5 references: 4 Soviet and 1 German.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: May 6, 1960

Card 3/3

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; KARPOV, T.P. [deceased]; UGLOVA, E.V.; MALYANOV, V.A.

Mechanism of the reaction of isotopic exchange between dialkyl mercury and alkyl mercury halides. Dokl.AN SSSR 134 no.2: 360-363 S '60. (MIRA 13:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Reutov).
(Mercury organic compounds)
(Mercury--Isotopes)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

NESMEYANOV, A.N.; REUTOV, O.A.; GUDKOVA, A.S.

Some reactions of methyl β,β'-dichlorovinyl ketone. Izv. AN SSSR, Otd. khim. nauk no.2:260-264 F '61. (MIRA 14:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Ketone)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

89907

S/062/61/000/002/003/012
B115/B207

53700 2209

AUTHORS: Ptitsyna, O. A., Reutov, O. A., and Ertel', G.

TITLE: Synthesis of organoantimony compounds by means of diaryl iodonium salts

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, no. 2, 1961, 265-270

TEXT: To synthesize organoantimony compounds, the authors used iodonium salts, a method which they had described earlier. To determine the optimum conditions, they decomposed both the double salt of diphenyl iodonium chloride and of antimony trichloride, as well as a mixture of $(C_6H_5)_2ICl$ and $SbCl_3$. The double salt $[(C_6H_5)_2ICl]_2 \cdot SbCl_3$ was prepared by pouring together the solutions of diphenyl iodonium chloride and of antimony trichloride. Independently of the ratio of initial components, it had the same composition. The double salt $[(C_6H_5)_2ICl]_2 \cdot SbCl_3$ was decomposed with antimony powder in acetone or ethyl acetate at different temperatures and different ratios of reagents.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

89907

S/062/61/000/002/003/012
B115/B207

Synthesis of organoantimony ...

The following table shows the results of this study:

Molecular ratio of the double salt and antimony	Reaction conditions	Time of reaction, in hr	Total yield of organoantimony compounds, in %
1 : 1.6	in acetone at room temperature	25	15
1 : 4.8	" "	55	33
1 : 3.0	in boiling acetone	3	63
1 : 4.8	in ethyl acetate at room temperature	55	38
1 : 4.8	in boiling ethyl acetate	6	22
1 : 4.8	" "	12	27

The yield was referred to the iodonium double salt used for the reaction. The table shows that boiling acetone is the best solvent. A mixture of organoantimony compounds:

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S/062/61/000/002/003/012
B115/B207

Synthesis of organoantimony ...

$$9\,[(C_6H_5)_2JCl]_2\cdot SbCl_3+8Sb \rightarrow 6\,(C_6H_5)_3\,SbCl_2+18C_6H_5J+11SbCl_3$$

$$3\,[(C_6H_5)_2JCl]_2\cdot SbCl_3+2Sb \rightarrow 3\,(C_6H_5)_2\,SbCl_3+6C_6H_5J-2SbCl_3$$

$$3\,[(C_6H_5)_2JCl]_2\cdot SbCl_3+4Sb \rightarrow 3\,(C_6H_5)_2\,SbCl+6C_6H_5J+4SbCl_3$$

forms in the decomposition of the iodonium double salts by antimony powder just as in the decomposition of the double diazonium salts. The above-described method has the disadvantage that it is based on the preparation of iodonium double salts. The authors proved, however, experimentally in the present study that in the decomposition of mixtures $(C_6H_5)_2ICl$ and $SbCl_3$ with antimony powder in boiling acetone, the organoantimony compounds formed with the same yield as in the decomposition of the double salt $[(C_6H_5)_2ICl]_2\cdot SbCl_3$. The decomposition of the Ar_2ICl and $SbCl_3$ mixture by antimony in boiling acetone was further applied by the authors to the synthesis of organoantimony

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APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

89907

S/062/61/000/002/003/012
B115/B207

Synthesis of organoantimony ...

compounds with other radicals. As it may be seen from Table 2, the diaryl iodonium chloride decomposition with antimony in the presence of $SbCl_3$ leads to mixtures of organoantimony compounds in satisfactory yield (60-70%). In this case, the organoantimony compounds are obtained by subjecting the diaryl iodonium double salts of antimony trichloride to decomposition. The authors base this assumption on the fact that when boiling the mixture of $(C_6H_5)_2ICl$ and $SbCl_3$ in acetone in the absence of antimony powder, they obtained only a double salt only from the acetone solution of the following composition $[(C_6H_5)_2ICl]_{1.8}\cdot SbCl$. The salt obtained is very likely a mixture of two iodonium double salts $(C_6H_5)_2ICl\cdot SbCl_3$ and $[(C_6H_5)_2ICl]_2\cdot SbCl_3$. Furthermore, the authors answered the question as to whether organometal compounds of antimony may be obtained by the interaction of diaryl iodonium chloride with antimony powder in the absence of antimony trichloride. They found that organoantimony compounds formed in the reaction of diphenyl iodonium chloride with antimony in acetone, that

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S/062/61/000/002/003/012
B115/B207

Synthesis of organoantimony ...

the yield, however, depended on the kind of antimony used. Thus, the yield was 28% when a fine-ground powder of metallic antimony was used. It was 24% when antimony prepared in the following way was used: An equimolar quantity of zinc powder was admixed to the solution of SbCl in dilute hydrochloric acid; the resulting precipitate was filtered off, washed out with dilute hydrochloric acid, water, and a sodium carbonate solution (to remove HCl traces), then washed again with water, alcohol, and ether, and dried in air. The yield in organoantimony compounds was 50% if the antimony thus prepared was used (but without sodium carbonate treatment). When decomposing $(C_6H_5)_2ICl$ with fine-ground antimony powder in the presence of hydrochloric acid traces, the authors obtained a 52% yield. On the basis of these data, they finally state that hydrochloric acid promotes the formation of organoantimony compounds in the decomposition of $(C_6H_5)_2ICl$ with antimony. From the mentioned data it may be seen that the decomposition of diphenyl iodonium chloride with antimony leads to the formation of organoantimony compounds. Thus, antimony trichloride favors this reaction. When diphenyl iodonium iodide was used instead of diphenyl iodonium chloride, the yield

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

89907

S/062/61/000/002/003/012
B115/B207

Synthesis of organoantimony ...

in organoantimony compounds fell considerably (9% as compared to 50%). There are 2 tables and 15 references: 7 Soviet-bloc and 8 non-Soviet-bloc.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: November 26, 1959

Card 6/7

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

89907

S/062/61/000/002/003/012
B115/B207

Synthesis of organoantimony ...

Таблица 2

Разложение смеси Ar_2JCl и $SbCl_3$ порошком сурьмы в кипящем ацетоне

1. Соль йодония	2. Выход сурьмяноорганических соединений, %			3.
	Ar_4SbX	Ar_3SbX_2	Ar_2SbX_3	суммарный выход
$(C_6H_5)_2JCl$	20	41	—	61
$(p\text{-}ClC_6H_4)_2JCl$	15	11	43	69
$(p\text{-}BrC_6H_4)_2JCl$	42	17	18	61,7
$(p\text{-}CH_3C_6H_4)_2JCl$	22	29	8,5	59,5

Legend to Table 2: 1) Iodonium salt, 2) yield in organoantimony compounds, %, 3) total yield

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APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SOKOLOV, V.I.; BELETSKAYA, I.P.

Study of electrophilic substitution reactions at a saturated carbon atom by use of the isotope exchange method. Report No.1: Kinetics of the isotope exchange reaction of ethyl -(bromomercuri) phenyl acetate with mercury bromide tagged with Hg^{203} in pyridine. Izv. AN SSSR. Otd.khim.nauk no.7:1213-1217 Jl '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova. (Acetic acid) (Mercury bromide) (Substitution (Chemistry))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SOKOLOV, V.I.; BELETSKAYA, I.P.

Study of electrophilic substitution reactions at a saturated carbon atom by use of the isotope exchange method. Report No.2: Kinetics of the isotope exchange reaction of ethyl α-(bromomercuri)phenyl acetate with mercury bromide tagged with Hg^{203} in water - dioxane mixture. Izv. AN SSSR. Otd.khim.nauk no.7:1217-1222 Jl '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova. (Acetic acid) (Mercury bromide) (Substitution (Chemistry))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SOKOLOV, V.I.; BELETSKAYA, I.P.

Study of the electrophilic substitution reaction at a saturated carbon atom by the isotope exchange method. Report No.3: Isotope exchange of esters of α-bromomercuriarylacetic acids with mecury bromide tagged with Hg^{203}, in water-dioxane. Izv. AN SSSR. Otd.khim.nauk no.8:1427-1429 Ag '61. (MIRA 14:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
(Acetic acid)
(Mercury—Isotopes)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SOKOLOV, V.I.; BELETSKAYA, I.P.

Study of electrophylic substitution at a saturated carbon atom using the isotope exchange method. Report No.4: Kinetics of isotopic exchange between ethyl α-(bromomercuri) phenylacetates and mercury bromide tagged with Hg^{203} in dimethylformamide. Izv. AN SSSR. Otd.khim.nauk no.9:1561-1565 S '61. (MIRA 14:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Acetic acid) (Mercury bromide) (Mercury--Isotopes)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; REUTOV, O.A.; GUR'YANOVA, T.F.

Substitution for halogen of a mercury atom bonded to a saturated carbon atom. Report No.1: Interaction between benzyl mercury chloride and iodine in the presence of iodine ion in dioxane. Izv. AN SSSR. Otd.khim.nauk no.9:1589-1595 S '61. (MIRA 14:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury compounds) (Iodine)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; REUTOV, O.A.; KARPOV, V.I.

Electrophylic substitution reactions at the olefin carbon atom. Report No.1: Reaction of trans-β-chloroviny mercury chloride with iodine in the presence of iodine ion in aqueous dioxane. Izv.AN SSSR.Otd.khim.nauk no.11:1961-1965 N '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury organic compounds) (Substitution (Chemistry))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; REUTOV, O.A.; GUR'YANOVA, T.P.

Reaction of the substitution of a halogen for a mercury atom combined to a saturated carbon atom. Report No.2: Reaction of benzyl mercury chloride with iodine in the presence of an iodine anion in dimethylformamide, methyl, and ethyl alcohols. Izv.AN SSSR.Otd. khim.nauk no.11:1997-2002 N '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury organic compounds) (Iodine)
(Substitution (Chemistry))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SHATKINA, T.N.

Isomerization of free alkyl radicals in solutions. Izv.AN SSSR.Otd.khim.nauk no.11:2032-2038 N '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i Akademiya meditsinskikh nauk SSSR.
(Radicals (Chemistry)) (Isomerization)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SHATKINA, T.N.

Rearrangement of a propyl cation formed in the action of nitrous acid on n.propylamine perchlorate. Izv.AN SSSR.Otd.khim.nauk no.11:2038-2043 N '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i Akademiya meditsinskikh nauk SSSR.
(Propylamine) (Nitrous acid)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; REUTOV, O.A.; KARPOV, V.I.

Electrophylic substitution reactions at olefin carbon atom. Report No.2: Reaction of trans- and cis-β-chlorovinylmercury chloride with iodine in the presence of cadmium iodide in absolute methanol. Izv. AN SSSR Otd.khim.nauk no.12:2125-2128 D '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury compounds) (Cadmium iodide) (Substitution (Chemistry))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; REUTOV, O.A.; KARPOV, V.I.

Electrophylic substitution reactions at olefin carbon atom. Report No.3: Reaction of trans- and cis-2-chlorovinylmercury chloride with iodine in the presence of cadmium iodide in dimethylformamide. Izv. AN SSSR Otd.khim.nauk no.12:2129-2132 D '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury compounds) (Cadmium iodide) (Substitution (Chemistry))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; REUTOV, O.A.; GUR'YANOVA, T.P.

Reaction substituting a halogen for a mercury atom combined with saturated carbon atom. Izv. AN SSSR Otd.khim.nauk no.12:2178-2182 D '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury compounds) (Iodine)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; BELETSKAYA, I.P.; ARTAMKINA, G.A.

Synthesis of some organomercury salts of the type $p\text{-}X_6H_4CH(HgBr)COOR$. Zhur.ob.khim. 30 no.10:3220-3223 O '61. (MIRA 14:4)

1. Moskovskiy gosudarstvennyy universitet.
(Mercury organic compounds)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; REUTOV, O.A.; BUCHKOVSKIY, Z.F.

Infrared absorption spectra of double diazonium salts of bismuth and antimony chlorides. Zhur.ob.khim. 31 no.6:2065-2069 Je '61. (MIRA 14:6)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Diazonium compounds—Spectra)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; REUTOV, O.A.; BUCHKOVSKIY, Z.F.

Double diazonium salts of bivalent cobalt and copper chlorides.
Zhur.ob.khim. 31 no.9:2943-2950 S '61. (MIRA 14:9)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Diazonium compounds) (Cobalt chloride) (Copper chloride)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; REUTOV, O.A.; KIKOT', B.S.

Infrared absorption spectra of double salts of o- and m-substituted aryldiazonium chlorides with metal chlorides. Zhur.ob.khim. 31 no.9:2950-2957 S '61. (MIRA 14:9)
(Diazonium compounds--Spectra) (Chlorides--Spectra)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; KHU KHUN-VEN, BELETSKAYA, I.P.; SMOLINA, T.A. (Moscow)

Isotope exchange kinetics of ethyl α-bromomercuriphenylacetate with Hg^{203}-tagged phenyl mercury bromide. Zhur.fiz.khim. 35 no.11:2424-2428 N '61. (MIRA 14:12)

(Acetic acid)
(Mercury--Isotopes)
(Mercury compounds)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

S/020/61/136/002/023/034
B016/B060

AUTHORS: Reutov, O. A., Corresponding Member AS USSR, and Sokolov, V. I.

TITLE: Radiochromatography of Organomercury Compounds

PERIODICAL: Doklady Akademii nauk SSSR, 1961, Vol. 136, No. 2, pp. 366-368

TEXT: The authors have frequently met with difficulties in their experiments on the isotopic exchange of organomercury compounds (I) - (VI) (Refs. 1-4), owing to the fact that the reacting substances were difficultly separable due to very similar solubility. The article under consideration gives a description of a radiochromatographic separation method which may be applied to the study of kinetic modifications during the separation of organomercury compounds both from one another and from inorganic mercury salts. The authors proved that the organomercury compounds of $HgBr_2$ are readily separable by paper-chromatography, the paper having been impregnated with a 10% ethylene glycol solution in acetone a few hours earlier. For a mobile phase, the mixture of octane with benzene

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(3:2) gave the best results. $HgBr_2$ remains on the spot to which the solution was applied, while the organomercury compound moves directly behind the front of the solvent. 4 - 5 cm in such movement and less than 5 min are enough for a satisfactory separation. When using pyridine the chromatogram was 8 - 9 cm long. The development of the zones was brought about with diluted dithizone solution in chloroform or CCl_4. A lilac-pink color appeared with organomercury salts, and a pink-red-yellow one with $HgBr_2$ (Ref. 6). The authors performed the separation of mixtures of organomercury salts $XC_6H_4CH(HgBr)COOR$ and $YC_6H_4CH(HgBr)COOR$ in two cases: X = H, Y = n-Br and X = nBr, Y = o-CH_3. The separation took place with 10% olive oil solution in petroleum ether in the inverse phase. The mobile phase was provided by aqueous ethanol or methanol. The dependence of R_f on the alcohol concentration was:

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

X	65% ethanol	70% ethanol	80% methanol
H	0.19	0.20	-
n-Br	0.07	0.09	0.18
o-CH_3	-	-	0.30

Radiochromatography was applied in the study of the kinetics of isotopic exchange of ethyl esters of α-bromine mercury aryl acetic acids with $HgBr_2$ (tagged with Hg^{203}) in pyridine and 70% aqueous dioxan (Ref. 7). The degree of exchange was calculated on the basis of the ratio between the activities corresponding to the organomercury compound and those corresponding to $HgBr_2$ on the individual paper zones:

$$F = \frac{A_{Hg-OC}}{A_{Hg-OC} + A_{HgBr_2}} \cdot \frac{C_{Hg-OC} + C_{HgBr_2}}{C_{Hg-OC}},$$

where Hg-OC denotes the organomercury compound, A the activity, and C the concentration. No secondary exchange on paper occurs under the experimental conditions. Results agreed with those of the usual method

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

Radiochromatography of Organomercury Compounds

S/020/61/136/002/023/034
B016/B060

(preparatory isolation of a substance and measurement of its activity). The advantages offered by the method under discussion and its fields of application are stressed. There are 7 references: 5 Soviet, 1 US, and 1 Japanese.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov). Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental Organic Compounds, Academy of Sciences USSR)

SUBMITTED: September 16, 1960

$$R_2Hg + \dot{H}g \rightleftarrows R_2\dot{H}g + Hg \ (^1) \qquad (I)$$

$$R_2Hg + R'_2\dot{H}g \rightleftarrows R_2\dot{H}g + R'_2Hg \ (^2) \qquad (II)$$

$$R_2Hg + R\dot{H}gX \rightleftarrows R_2\dot{H}g + RHgX \ (^3) \qquad (III)$$

$$RHgX + \dot{H}g \rightleftarrows R\dot{H}gX + Hg \ (^4) \qquad (IV)$$

$$RHgX + \dot{H}gX_2 \rightleftarrows R\dot{H}gX + HgX_2 \qquad (V)$$

$$RHgX + R'\dot{H}gX \rightleftarrows R\dot{H}gX + R'HgX \qquad (VI)$$

Card 4/4

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SOKOLOV, V.I.; BELETSKAYA, I.P.

Electrophilic substitution at a saturated carbon atom. Influence of sulfur on the mechanism of the isotopic exchange reaction taking place between ethyl α-bromomercuriphenylacetate and mercuric bromide labeled with Hg^{203}. Dokl. AN SSSR 136 no. 3:631-633 Ja '61. (MIRA 14:2)

1. Chlen-korrespondent AN SSSR (for Reutov).
(Substitution (Chemistry)) (Acetic acid) (Mercury bromide)
(Mercury-Isotopes)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; PTITSYNA, O.A.; TURCHINSKIY, M.F.

Paper chromatography of diaryl organotin compounds and its use in the study of the products of reaction between asymmetric diaryliodonium salts and tin dichloride. Dokl. AN SSSR 139 no. 1:146-149 Jl '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Reutov).
(Tin organic compounds) (Iodonium compounds)
(Paper chromatography)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SMOLINA, T.A.; KALYAVIN, V.A.

Isotopic exchange reaction between substituted benzylmercury bromides and mercuric bromide tagged with the Hg^{203} radioactive isotope. Dokl. AN SSSR 139 no.2:389-392 Jl '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Reutov).
(Mercury bromide) (Mercury--Isotopes)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; LOVTSOVA, A.N.

New method of synthesizing trichloromethyl organomercury compounds. Dokl. AN SSSR 139 no.3:622-625 Jl '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Reutov).
(Mercury organic compounds)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; PASYNKEVICH, S.V.; REUTOV, O.A.

Synthesis and study of the structure of double diazonium salts of aluminum halides. Dokl. AN SSSR 141 no.3:624-627 N '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Reutov).

(Diazonium compounds)
(Aluminum halides)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.

(4)

KOCHESHKOV, Ksenofont A., Corresponding Member, Academy of Sciences USSR, SHEVERDINA, N. I., and PALEYEVA, I. YE., all at Scientific Research Physico-Chemical Institute imeni L. Ya. Karpov - "Research in the realm of organometallic compounds of zinc and cadmium" (Morning session 28 Sep 62) [Only KOCHESHKOV is included in the List of Participants in the Colloquium. KOCHESHKOV is also scheduled as President of the Morning session 25 Sep 62.]

REUTOV, Oleg A., Faculty of Chemistry, Moscow State University - "On the synthesis of optical active alkylmagnesium and alkyllithium compounds by means of mercuriorganic compounds" (Morning session, 25 Sep 62)

report to be submitted for the Intl. Colloquium on Organometallic Derivatives (CNRS) Paris France, 24-28 Sep 1962.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; REUTOV, O.A.; AZIZYAN, T.A.

Reactions of the substitution of halogen for mercury atom combined with saturated carbon atom. Report No.4: Interaction between benzylmercury chloride and bromine in carbon tetrachloride. Izv. AN SSSR Otd.khim.nauk no.2:223-227 F '62. (MIRA 15:2)

1. Moskvskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury compounds)
(Bromine)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; AZIZYAN, T.A.; REUTOV, O.A.

Substitution of the mercury atom combined with a saturated carbon atom by halogen. Report No.5: Interaction of benzyl mercury chloride with bromine in the presence of ammonium bromide in polar solvents. Izv.AN SSSR.Otd.khim.nauk no.3: 424-430 Mr '62. (MIRA 15:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. (Mercury compounds) (Bromine) (Substitution (Chemistry))

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; PASYNKEVICH, S.V.; KUZNETSOVA, A.V.; REUTOV, O.A.

Synthesis, structure, and infrared spectra of boron halides and aryl diazonium tetraphenyl borates. Izv.AN SSSR.Otd.-khim.nauk no.3:448-453 Mr '62. (MIRA 15:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. (Boron halides--Spectra) (Diazonium compounds--Spectra)

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

36637

S/062/62/000/004/006/013
B110/B101

5.3700

AUTHORS: Ptitsyna, O. A., Kozlova, A. N., and Reutov, O. A.

TITLE: Synthesis of organo-antimony compounds via diaryl iodonium double salts of antimony pentachloride

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 4, 1962, 634-638

TEXT: Diaryl iodonium salts had been used by the authors already earlier (Dokl. AN SSSR, 114, 110 (1957); ibid., 122, 825 (1958); ibid., 122, 1032 (1958)) for synthesizing organometallic compounds of tin, mercury, bismuth, and antimony. The use of double salts of diaryl iodonium chloride and antimony pentachloride, $Ar_2ICl \cdot SbCl_5$, for synthesizing organo-antimony compounds has been studied here. They were obtained by pouring together the component solutions in concentrated HCl. The double salt was freed from acid and purified by dissolution in absolute acetone and precipitation with absolute ether. Products in quantitative yield: (1) $(C_6H_5)_2ICl \cdot SbCl_5$ (A), m.p. 167-168°C; (2) $(p\text{-}CH_3C_6H_4)_2ICl \cdot SbCl_5$ (B),

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m.p. 145-146°C; (3) $(p\text{-}ClC_6H_4)_2ICl\cdot SbCl_5$ (C) m.p. 186-187°C; (4) $(p\text{-}BrC_6H_4)_2ICl\cdot SbCl_5$ (D) m.p. 225-226°C; (5) $(p\text{-}CH_3OC_6H_4)_2ICl\cdot SbCl_5$ (E) m.p. 137-138°C. The double salts are colorless, crystalline, readily soluble in acetone, poorly soluble in benzene, and insoluble in ether and water. To find the optimum conditions for producing organo-antimony compounds, the decomposition of $(C_6H_5)_2ICl\cdot SbCl_5$ with iron and antimony in benzene and acetone was investigated. With iron, the reaction in acetone proceeds slowly, diphenyl antimonic acid being formed in a quantity of 6%. With antimony, the reaction proceeds under heating, and the yield of organo-antimony compounds depends on the reaction time: 56% of diphenyl antimonic acid and 2.5% of diphenyl antimony oxide were obtained in 25 hrs, and 38% of diphenyl antimonic acid in 5 hrs. A, B, C, and D yielded the respective diaryl antimonic acids: $2Ar_2ICl\cdot SbCl_5 + 2Sb \longrightarrow Ar_2SbCl_3 + 3SbCl_3 + 2ArI$; $Ar_2SbCl_3 + 3NH_4OH \longrightarrow Ar_2SbOOH + 3NH_4Cl + H_2O$. Yields: 56% from A, 42% from B, 65 % from C, and 46% from D. There are 2 tables.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

Synthesis of organo-antimony ... S/062/62/000/004/006/013
B110/B101

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: November 2, 1961

Card 3/3

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

36638
S/062/62/000/004/007/013
B110/B101

5.3700

AUTHORS: Ptitsyna, O. A. Reutov, O. A., and Ovodov, Yu. S.

TITLE: Synthesis of organo-bismuth compounds via diaryl iodonium salts

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 4, 1962, 638-644

TEXT: Bismuth triaryl compounds in yields of 13-23% had earlier been obtained by the authors (Dokl. AN SSSR 122, 1032 (1958)) by decomposing asymmetric diaryl iodonium salts, ArAr'ICl and $BiCl_3$, on Bi powder in acetone. Now, an attempt was made to obtain them by decomposing symmetric diaryl iodonium salts: $3Ar_2ICl + BiCl_3 + 3Bi \longrightarrow 2Ar_3Bi + 3ArI + 2BiCl_3$. An addition of 0.05 moles of $BiCl_3$ per mole of iodonium salt was sufficient for decomposing $(C_6H_5)_2ICl$ with Bi powder. Optimum conditions: iodonium salt - $BiCl_3$ ratio of 2:1, threefold Bi

Card 1/3

...ctly
...ver decomposition, the
...muth compounds insoluble in

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acetone. The HCl formed by the hydrolysis of $BiCl_3$ with air moisture readily dearylates the compounds Ar_2BiCl and $ArBiCl_2$:
$BiCl_3 + H_2O \longrightarrow BiOCl + 2HCl$; $Ar_2BiCl + HCl \longrightarrow ArBiCl_2 + ArH$;
$ArBiCl_2 + HCl \longrightarrow BiCl_3 + ArH$. This explains the formation of the relevant aromatics. There are 3 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

SUBMITTED: November 21, 1961

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8"

"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

GUDKOVA, A.S.; REUTOV, O.A.

Interaction of hydrazones and azines with salts. Report No.3: Interaction of hydrazones of aliphatic aldehydes and ketones with cupric salts. Izv.AN SSSR.Otd.khim.nauk no.7:1203-1208 Jl '62. (MIRA 15:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR.
(Hydrazones) (Copper salts)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

GUDKOVA, A.S.; REUTOV, O.A.; ALEYNIKOVA, M.Ya.

Interaction of hydrazones and azines with metal salts. Report No.4: Interaction of aldehyde and ketone azines with bivalent copper salts. Izv.AN SSSR.Otd.khim.nauk no.8:1382-1387 Ag '62. (MIRA 15:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR.
(Azines) (Copper salts)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

GUDKOVA, A.S.; ALEYNIKOVA, M.Ya.; KHARITONOVA, M.L.; REUTOV, O.A.

Complexes of azines and hydrazones with mercury halides. Izv. AN SSSR.Otd.khim.nauk no.8:1496 Ag '62. (MIRA 15:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR.
(Azines) (Hydrazones) (Mercury halides)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; PASYNKEVICH, S.V.; KUZNETSOVA, A.V.; REUTOV, O.A.

Synthesis, structure, and infrared spectra of aryl diazonium cadmium halides. Izv. AN SSSR.Otd.khim.nauk no.10:1762-1767 O '62. (MIRA 15:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Diazonium compounds—Spectra)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZANSKIY, B.A., akademik; REUTOV, O.A.; BYKOV, G.V., kand.khimicheskikh nauk

One hundred years of the theory of the structure of organic compounds. Zhur. VKHO 7 no.3:242-249 '62. (MIRA 15:6)

1. Akademiya nauk SSSR (for Reutov).
(Chemical structure)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.

Stereochemistry of substitution reactions. Zhur. VKHO 7 no.3: 290-300 '62. (MIRA 15:6)

1. Chlen-korrespondent Akademii nauk SSSR.
(Substitution (Chemistry)) (Stereochemistry)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; REUTOV, O.A.; ARTAMKINA, G.A.

Synthesis of some organomercuric salts of the type $XC_6H_4CH(HgBr)CO_2C_2H_5$. Part 2. Zhur. ob khim. 32 no.1:241-244 Ja '62. (MIRA 15:2)
(Mercury organic compounds) (Acetic acid)
(Esters)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SMOLINA, T.A.; KALYAVIN, V.A.

Isotopic exchange reaction of benzylmercury bromide with Hg^{203}-tagged mercuric bromide. Zhur. fiz. khim. 36 no.1:119-123 Ja '62. (MIRA 16:8)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR.
(Mercury—Isotopes) (Mercury organic compounds)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; BELETSKAYA, I.P.; ALEYNIKOVA, M.Ya.

Cleavage of a carbon-mercury bond under the effect of acids. Zhur. fiz. khim. 36 no.3:489-493 Mr '62. (MIRA 17:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

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REUTOV, O.A.; SHATKINA, T.N.

Mechanism of the Demianov reaction. Dokl. AN SSSR 142 no.4:835-837 F '62. (MIRA 15:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i Akademiya meditsinskikh nauk SSSR. 2. Chlen-korrespondent AN SSSR (for Reutov).

(Cyclohexlamine)
(Cyclohexanol)
(Carbon--Isotopes)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

GUDKOVA, A.S.; REUTOV, O.A.; ALEYNIKOVA, M.Ya.; KHARITONOVA, M.L.

Synthesis of complexes of aldazines and ketazines with copper semihalide. Dokl. AN SSSR 143 no.5:1098-1100 Ap '62. (MIRA 15:4)

1. Moskovskiy gosudarstvenny universitet im. M.V.Lomonosova.
2. Chlen-korrespondent AN SSSR (for Reutov).
(Azines) (Copper halides)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

NESMEYANOV, Nik.A.; REUTOV, O.A.

Mechanism of bimolecular electrophilic substitution at a saturated carbon atom. Dokl.AN SSSR 144 no.1:126-128 My '62. (MIRA 15:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
2. Chlen-korrespondent AN SSSR (for Reutov).
(Substitution (Chemistry))

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; GUDKOVA, A.S.; ALEYNIKOVA, M.Ya.; KHARITONOVA, M.L.

Complexes of azines with copper semihalide. Izv.AN SSSR.Otd. khim.nauk no.3:538-539 Mr '62. (MIRA 15:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR.
(Copper organic compounds) (Azines)

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AMBARTSUMYAN, V.A., akademik; ASRATYAN, E.A.; BOGOLYUBOV, N.N., akademik; VINOGRADOV, A.P., akademik; GINETSINSKIY, A.G.; KNUNYANTS, I.L., akademik; KOCHETKOV, N.K.; KURSANOV, A.L., akademik; MEL'NIKOV, O.A.; NESMEYANOV, A.N., akademik; NESMEYANOV, An.N., doktor khim. nauk; OBREIMOV, I.V., akademik; POLIVANOV, M.K., kand.fiz.-mat.nauk; REUTOV, O.A.; RYZHKOV, V.L.; SPITSIN, V.I., akademik; TAMM, I.Ye., akademik; FESENKOV, V.G., akademik; FOK, V.A., akademik; SHCHERBAKOV, D.I., akademik; FRANK, I.M.; FRANK, G.M.; KHOKHLOV, A.S., doktor khim. nauk; SHEMYAKIN, M.M., akademik; ENGEL'GARDT, V.A., akademik; SHAPOSHNIKOV, V.N., akademik; BOYARSKIY, V.A.; LIKHTENSHTEYN, Ye.S.; VYAZEMTSEVA, V.N., red.izd-va; KLYAYS, Ye.M., red.izd-va; TARASENKO, V.M., red.izd-va; POLYAKOVA, T.V., tekhn. red.

[As seen by a scientis: From the Earth to galaxies, To the atomic nucleus, From the atom to the molecule, From the molecule to the organism] Glazami uchenogo: Ot Zemli do galaktik, K iadru atoma domolekuly, Ot molekuly do organizma. Moskva, Izd-vo AN SSSR, 1963. 736 p. (MIRA 16:12)

1. Akademiya nauk SSSR. 2. Chlen-korrespondent AN SSSR (for Asratyan, Ginetsinskiy, Kochetkov, Mel'nikov, Reutov, Ryzhkov, Frank, I.M., Frank, G.M.)
(Astronomy) (Nuclear physics) (Chemistry) (Biology)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

CHICHIBABIN, Alekseey Yevgen'yevich. Prinimali uchastiye: REUTOV, O.A.; KITAYGORODSKIY, A.I., prof.; LIBERMAN, A.L., doktor khim. nauk; BAGDASAR'YAN, Kh.S., doktor khim. nauk; PLATE, N.A., kand. khim. nauk; KOLOSOV, M.N., kand. khim. nauk; BOTVINIK, M.M., doktor khim. nauk; STEPANOV, V.M., kand. khim. nauk; MEL'NIKOV, N.N., prof.; DEREVITSKAYA, V.A., doktor khim. nauk; LIBERMAN, A.L., red.; SERGEYEV, P.G. [deceased]; ROMM, R.S., red.; SHPAK, Ye.G., tekhn. red.

[Basic principles of organic chemistry] Osnovnye nachala organicheskoi khimii. Izd.7. Pod red. P.G.Sergeeva i A.L. Libermana. Moskva, Goskhimizdat. Vol.1. 1963. 910 p. (MIRA 16:10)

1. Chlen-korrespondent AN SSSR (for Reutov).
(Chemistry, Organic)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O. A.; SHATKINA, T. N.

Rearrangement of n-propyl-1-C^{14} chloride into n-propyl-3C^{14} chloride. Izv. AN SSSR, Otd. khim. nauk no.1:195 '63. (MIRA 16:1)

1. Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova.

(Propane) (Rearrangements(Chemistry))

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; KUPLETSKAYA, N.B.; PTITSYNA, V.A.; REUTOV, O.A.

Double diazonium salts of monovalent copper. Izv.AN SSSR.Otd. khim.nauk no.3:562-563 Mr '63. (MIRA 16:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Diazonium compounds) (Copper salts)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; ARTAMKINA, G.A.; REUTOV, O.A.

"Cosymmetrization" reaction of benzyl mercury bromide with ethyl esters of α-bromomercuriaryl acetic acids. Izv. AN SSSR. Otd.khim. nauk no.4: 765-767 Ap '63. (MIRA 16:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury compounds) (Acetic acid)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; SOKOLOV, V.I.; BELETSKAYA, I.P.; RYABOKOBYLKO, Yu.S.

Study of electrophilic substitution reactions at a saturated carbon atom by the method of isotopic exchange. Report No.5: Isotopic exchange of ethyl ester of α-bromomercuriphenylacetic acid with mercury bromide tagged with Hg^{203} in water-ethanol. Izv. AN SSSR. Otd.khim.nauk no.6:965-969 Je '63. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Acetic acid) (Mercury bromides)
(Mercury isotopes)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; PRAYSNAR, Bronislav; BELETSKAYA, I.P.; SOKOLOV, V.I.

Study of electrophilic substitution reactions at a saturated carbon atom by the method of isotopic exchange. Report No.6: Kinetics of isotopic exchange of ethyl esters of α-bromomercuriarylacetic acids with mercury bromide tagged with Hg^{203} in dimethylsulfoxide. Izv. AN SSSR. Otd.khim.nauk no.6:970-976 Je '63. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Acetic acid) (Mercury bromides) (Mercury isotopes)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

BELETSKAYA, I.P.; AZIZYAN, T.A.; REUTOV, O.A.

Effect of oxygen-containing additions on the mechanism underlying the reaction of benzyl mercury chloride with bromine in carbon tetrachloride. Izv. AN SSSR. Ser.khim. no.7:1332-1333 Jl '63. (MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
(Mercury organic compounds)
(Bromine)

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PTITSYNA, O.A.; TURCHINSKIY, M.F.; SIDEL'NIKOVA, E.A.; REUTOV, O.A.

Photochemical reaction between triphenylphosphine and diphenyl iodonium salts. Izv.AN SSSR.Ser.khim. no.8:1527 Ag '63. (MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.
(Phosphine) (Iodonium compounds) (Photochemistry)

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SMOLINA, T.A.; KALYAVIN, V.A.; REUTOV, O.A.

Isotope exchange between allyl mercury bromide and cinnamyl mercury bromide. Izv. AN SSSR. Ser. khim. no.12:2235 D '63. (MIRA 17:1)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR.

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B106/B101

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AUTHORS: Kazitsyna, L. A., Reutov, O. A., Kikot', B. S., and Rassadin, B. V.

TITLE: Ultraviolet absorption spectra of hydroxy and methoxy-phenyl diazonium chlorides

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 27, no. 1, 1963, 53-55

TEXT: The ultraviolet absorption spectra of o-hydroxy-phenyl and p-hydroxy-phenyl diazonium chlorides in aqueous acid, neutral, and alkaline solutions were studied to explain the mechanism of converting the diazonium cation into quinone diazide. The spectra of solutions of o-methoxy and p-methoxy-phenyl diazonium chlorides were compared. The spectra of hydroxy compounds in strongly acid solutions of 5 N - 0.5 N HCl are consistent with those of methoxy compounds. This proves the existene of diazo cations. In neutral, aqueous solutions, hydroxy-phenyl diazonium chlorides exist as quinone diazides. Conversion of the diazo cation into quinone diazide is a reversible process. The curves of absorption in weakly acid solutions

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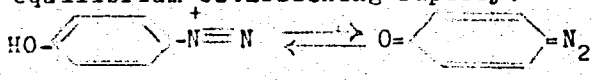
(0.1 N - $4 \cdot 10^{-4}$ N HCl) show the conversion to be determined by a dissociation equilibrium establishing rapidly:



The dissociation constant in ortho-isomers is much higher than in para isomers. All studied compounds were found to be unstable in dilute alkaline solutions. o-methoxy and p-methoxy-phenyl diazonium chlorides in concentrated lyes yield diazotates, whereas hydroxy derivatives are decomposed without the formation of diazotates. There are 2 figures and 1 table.

ASSOCIATION: Kafedra organicheskoy khimii Moskovskogo gos. universiteta im. M.V. Lomonosova (Department of Organic Chemistry of the Moscow State University imeni M.V. Lomonosov)

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KAZITSYNA, L. A.; KIKOT', B. S.; RASSADIN, B. V.; REUTOV, O. A.

Ultraviolet spectra of methoxyphenyldiazonium chlorides.
Zhur. ob. khim. 32 no.12:3977-3982 D '62. (MIRA 16:1)

(Diazonium compounds—Spectra)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L. A.; KIKOT', B. S.; RASSADIN, B. V.; REUTOV, O. A.

Ultraviolet absorption spectra of hydroxyphenyldiazonium chlorides. Zhur. ob. khim. 33 no.1:223-227 '63. (MIRA 16:1)

(Diazonium compounds--Spectra)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; REUTOV, O.A.; KIKOT', B.S.

Double diazonium salts of mercury chlorides and trivalent antimony. Zhur. ob. khim. 33 no.5:1561-1570 My '63. (MIRA 16:6)

(Diazonium compounds)
(Salts, Double)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; KIKOT', B.S.; ASHKINADZE, L.D.; REUTOV, O.A.

Infrared spectra of hydroxyphenyl diazonium compounds in the region 2100 to 2300 cm^{-1}. Zhur.ob.khim. 33 no.7:2238-2247 Jl '63. (MIRA 16:8)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Diazonium compounds--Absorption spectra)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; KUZNETSOVA, A.V.; REUTOV, O.A.

Infrared spectra of diazonium salts of pentavalent antimony.
Zhur.ob.khim. 33 no.7:2245-2247 Jl '63. (MIRA 16:8)
(Diazonium compounds--Absorption spectra) (Antimony compounds)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KAZITSYNA, L.A.; KUPLETSKAYA, N.B.; PETITSYNA, V.A.; REUTOV, O.A.

Electron spectra of binary diazonium salts of bivalent copper and cobalt. Zhur.ob.khim. 33 no.10:3243-3248 O '63.
(MIRA 16:11)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; BELETSKAYA, I.P.; ARTAMKINA, G.A.

Four-linked cyclic transition state in the reactions of electrophilic substitution of the organomercury compounds. Zhur. ob. khim. 34 no.8:2817-2818 Ag '64. (MIRA 17:9)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O. A.; BELETSKAYA, I. P.; ARTAMKINA, G. A.

Kinetics of symmetrization reaction of organomercury salts. Part 5: Effect of halogen substitutes in compounds of the type n-$XC_6H_4CH(HgBr)COOC_2H_5$ on the rate of symmetrization under the action of ammonia. Zhur. fiz. khim. 36 no.12:2582-2588 D '62. (MIRA 16:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

(Halogens) (Substitution(Chemistry)) (Esters)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

SOKOLOV, V.I.; REUTOV, O.A.

Computation of the rotation of optically active organomercury compounds and the stereochemistry of the addition of mercury salts to olefins. Dokl.AN SSSR 148 no.4:867-870 F '63. (MIRA 16:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Reutov).

(Mercury organic compounds) (Stereochemistry)
(Mercury salts) (Olefins)

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BELETSKAYA, I.P.; ARTAMKINA, G.A.; REUTOV, O.A.

"Cosymmetrization" reaction of organomercury salts. Dokl.AN SSSR 149 no.1:90-93 Mr '63. (MIRA 16:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
2. Cheln-korrespondent AN SSSR (for Reutov).
(Mercury organic compounds)
(Chemical reaction, Rate of)

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KAZITSYNA, L.A.; KIKOT', B.S.; ASHKINADZE, L.D.; REUTOV, O.A.

Correlation of the frequencies and intensities of infrared absorption bands for diazonium salts X - $C_6H_4N_2Cl$ with the constants of the substituent. Dokl. AN SSSR 151 no.3:573-576 Jl '63. (MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Reutov).

(Diazonium compounds--Absorption spectra)
(Substitution (Chemistry))

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NESMEYANOV, Nik.A.; ZHUZHLIKOVA, S.T.; REUTOV, O.A.

Sulfuration of phosphorylides. Sulfobetaines. Dokl. AN SSSR 151 no.4:856-858 Ag '63. (MIRA 16:8)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
2. Chlen-korrespondent AN SSSR (for Reutov).
(Phosphorus organic compounds) (Sulfuration) (Betaine)

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ARTAMKINA, G.A.; BELETSKAYA, I.P.; REUTOV, O.A.

"Anomalous" effect of substituents in S reactions. Dokl. AN SSSR 153 no.3:588-591 N '63. (MIRA 17:1)

1. Chlen-korrespondent AN SSSR (for Reutov).

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

REUTOV, O.A.; LOVTSOVA, A.N.

New method of production of dihalomethyl mercury organic compounds. Dokl. AN SSSR 154 no.1:166-168 Ja'64. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova i Institut elementoorganicheskikh soyedineniy AN SSSR. 2. Chlen-korrespondent AN SSSR (for Reutov).

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

NEUTOV, Oleg Aleksandrovich; YANOVSKAYA, L.A., red.

[Theoretical principles of organic chemistry] Teoreticheskie osnovy organicheskoi khimii. Moskva, Izd-vo Mosk. univ., 1964. 697 p. (MIRA 17:8)

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

SOKOLOV, V.I.; REUTOV, O.A.

Optical rotation and configuration of the compounds with an asymetrical atom of phosphorus. Izv.AN SSSR.Ser.khim. no.2: 394 F '64. (MIRA 17:3)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.

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REUTOV, O.A.; OSTAPCHUK, G.M.; REMOVA, V.A.

Isomerization of a free dideutero-n-propyl radical in solutions. Izv. AN SSSR. Ser.khim. no.3:519-524 Mr '64. (MIRA 17:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

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PTITSYNA, O.A.; LYATIYEV, G.G.; REUTOV, O.A.

Complexes of diphenyl iodonium boron fluoride with aromatic amines and pyridine. Izv. AN SSSR. Ser.khim. no.3:584-585 Mr '64. (MIRA 17:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

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"APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001444710020-8

KIKOT', B. S.; KAZITSYNA, L. A.; REUTOV, O. A.

Constitution of o- and p-hydroxyphenyl diazonium cations containing SO_3H- and COOH groups. Izv AN SSSR Ser Khim no. 4: 756-758 Ap '64. (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova.

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